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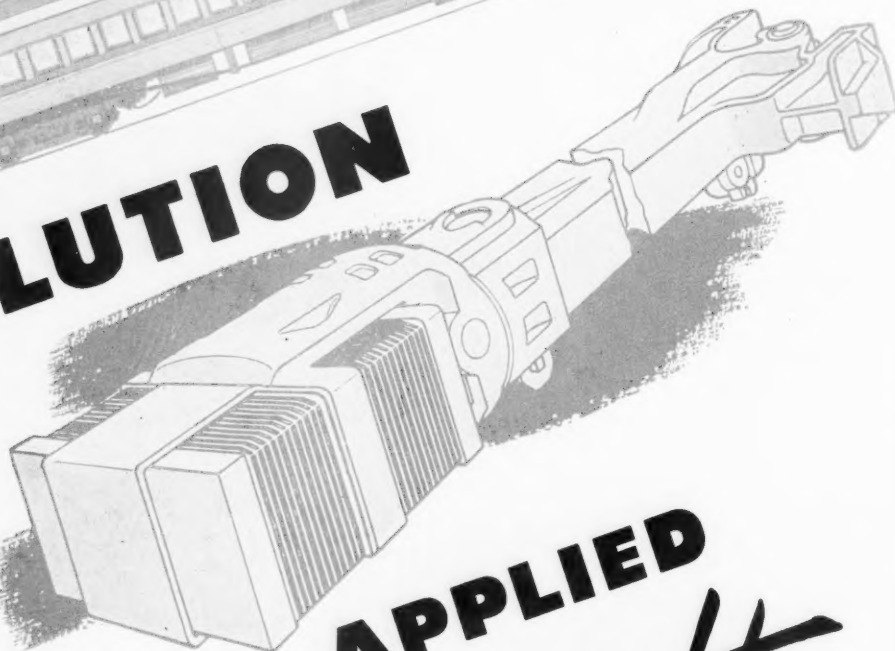
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The Week at a Glance

FREIGHT RATE INCREASE: Being well aware that there's a long and wearing row to be hoed before the commission gets around to acting, the railroads are making a timely application for authority to increase freight rates again. Their case is based on their present revenue situation, not on how that situation may be affected by the outcome of the brothers' "demands" for bigger emoluments. Our news columns report the extent of the increases proposed.

GETTING WISE TO CROSSER: Having yielded last year to brotherhood pressure to make the Crosser bigger-benefits bill a law, Congress is just now beginning to get a fairly good idea of what it voted for. The report of the House committee recommending modifications in its sickness and maternity provisions, and reducing the unemployment tax levy on the railroads, is abstracted in the news pages. The representatives seem to be appalled—and quite properly—at the enormity of the discrimination against employees in other industries produced by this law.

TO FEND OFF FIRE: Among the most destructive and costly fires to which railroad properties are susceptible those that spread below the decks of large piers take the lead. To curb such conflagrations the Norfolk & Western has installed fireproof cells, consisting of protective curtains of corrosion-resisting wrought iron plates capped by thick concrete, at intervals in the understructure of two tidewater terminal piers. Structural details are outlined in the illustrated article on page 49.

MOBILE POWER SOURCE: Having found many occasions when a dependable but temporary supply of electric power is required, the New York Central has fitted up a compact but versatile traveling generating plant, described this week on page 54. Mounted in a baggage car and using a 60-hp. Diesel engine, the plant yields 220-volt a.c. current, with facilities for converting it to 40 or 80 volt d.c. when required. It can be incorporated in a train or placed to serve parked Pullmans or located at any point where local sources of electricity are inadequate or inaccessible.

AGREED RATES BRIEFED: Special rates for all or a specified part of the traffic initiated by a shipper, made by agreement openly arrived at and approved by the appropriate regulatory authority, have been the subject of a series of articles in these pages by G. Lloyd Wilson. In this issue (page 40) the author rounds up the case for and against such agreed rates, and sets forth some 15 principles to be used as guides in deciding upon their fairness—to the carrier, the shipper, their competitors, and the public. But underlying these points is a basic rule of rate-making that is succinctly set forth in the concluding lines of the article. "The end to be sought by the carrier and the public is a pattern of freight rates which yields the carriers revenues sufficient to cover

operating expenses and a fair return at the market rate on the capital thus employed—assuming honest and competent management. . . . An orderly and symmetrical rate structure is desirable, but rates which will allow commerce, industry, and the carriers themselves to thrive are indispensable."

ANGELS WANTED: While there still are some commentators—not always distinguished for the precision or extent of their knowledge—who aver that the railroads are exceedingly backward about research to produce better equipment and more economical practices, there is an abundance of dollars-and-cents evidence of continuing technological progress in the art of railroading. But the industry's progress in the field of human relations has not kept pace with its advances in the field of the physical sciences. Statistics afford an index of sorts of this disparity, albeit a crude one. In 1946 the railroads, benefiting from technical improvements, produced 82 per cent more traffic units per man-hour than in 1926, but earned less than half as much net railway operating income, largely because they lagged in developing their social and political relationships. Our leading editorial elaborates on this situation, stressing the conclusion that the lack of progress in economics and sociology is closely related to a lack of automatic and tangible reward for achievement in those fields. There is an opportunity for philanthropy, or for joint action by some association of all the companies in the industry, to foster research and education in these neglected fields without expectation of immediate taxable return—that is, for what Broadway calls an "angel."

REGULAR REMINDER: As one means of keeping operating employees steadily conscious of the fact that consideration for the passenger is as much a part of their regular duties as others set forth in the book of rules, the C. & E. I. has established the practice of incorporating in its employees' timetable a "statement of policy in passenger relationships," the wording of which is given in a short article in this issue. In addition, the timetable warns "deadheads" that revenue passengers are entitled to the seats when trains are crowded, and reminds conductors that travelers' questions ought to be answered, that quiet on night runs is expected, and that the attractive appearance and atmosphere of a train depend very much on the pride its crew takes in it.

IN THE BACK OF THE BOOK: The Pennsylvania has a stockholders' committee to advise with the management on dealings with the unions and the government. . . . The I. C. C. is willing to have the Nickel Plate own enough Wheeling & Lake Erie stock to effect a merger. . . . The Shippers Boards predict a 4.7 per cent increase over last year in third-quarter car loadings. . . . Higher water-competitive transcontinental and Pacific coast railroad rates have been temporarily approved.

OPEN TOPS NOW: In June the most critical shortage of freight cars was of open tops, not of box cars, which were the worst problem last winter, but Car Service Chairman Kendall (whose latest review of the transportation situation is reported in our news pages) doesn't see daylight ahead yet in the closed car prospect, with another colossal wheat harvest already coming from the farms. Some progress is indicated in keeping cars on the move more of the time. Orders for 10,000 new freight cars were reported in these pages in June, our summary in this issue discloses, and according to the A. A. R. freight cars on order June 1 totaled 101,980.

BETTER CARS FOR CREWS: Fifty new cabooses, bay-window style, are going on the rails of the Southern Pacific lines (including the Texas & New Orleans). Their dimensions and specifications are outlined in the article on page 38. A. C. F. has equipped them with many of the comforts of home.

U. P. RADIO AT K. C.: Faster and more flexible yard and switching operations have resulted from the installation in the Kansas City terminal area of the Union Pacific of two-way radio communication facilities for the use of yardmasters and train crews. As is explained in the illustrated article in this issue, three yard offices and 16 switch engines are equipped, and conversations are feasible at any time between yardmasters and conductors engaged in yard work, industrial switching, or exchange of cars with connecting lines. The yardmasters are saved a lot of time and shoe leather in getting in touch with crews; the crews can communicate with the yard offices quickly when they need to; and locomotive utilization and the speed with which cars are put through the terminal are substantially improved.

PROMOTION THAT PAYS: Whether or not the railroads should take advice they have been offered to the effect that they ought to spend a great deal more than they do in advertising what they have to sell, it cannot be debated that most of them are doing a highly effective job of sales promotion in a related field. They are encouraging the establishment on their lines of new industries, expanding the markets and improving the efficiency of industries already operating and helping the farmers and other shippers of agricultural and forestry products to get larger returns from their labor through crop diversification, soil improvement, the introduction of better methods, and the maximum development of their outlets. The advantage to the railroad is not only in the additional tonnage these shippers provide but in addition is measured by the growth of every business in the communities that enjoy greater prosperity as a result of their success. A review of recent progress in this category of railroad salesmanship appears on page 44.

It's New!

"STANDARD" DIAGONAL PANEL ROOF

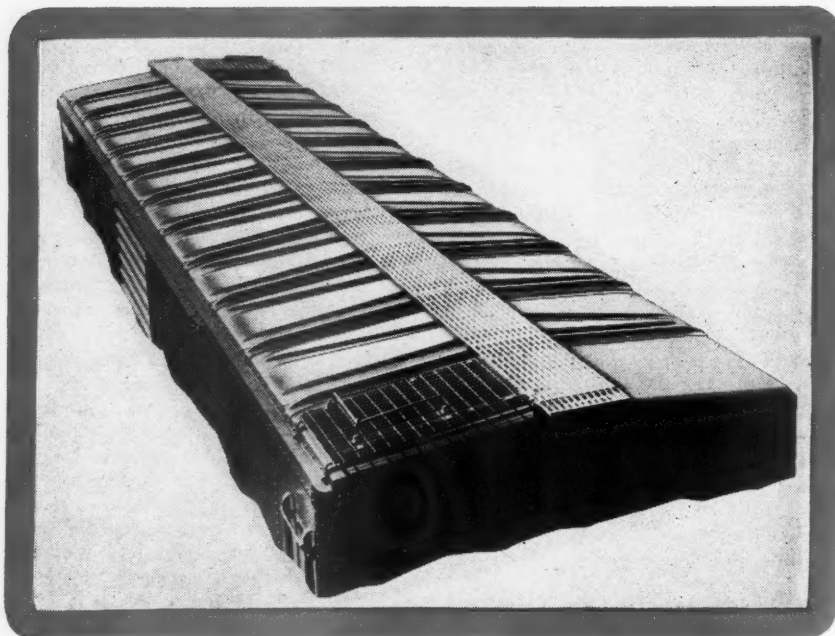
OUR ROOFS LAST
THE LIFE OF THE
CAR, AND ARE

- WEATHERPROOF
- DUST TIGHT

NOW

"STANDARD'S"
NEW ROOF IS

- 18% STRONGER
- MORE RIGID



- ✓ Continual research, development and testing by an organization with 50 years of freight car roof experience has created this new roof.
- ✓ The *DIAGONAL PANEL ROOF* is over 18% stronger for equal weight than any previous design, and develops a resistance to car body twisting which has not previously been available.
- ✓ This new design is not something old modified, but a new principle and unique method of forming light metal sheets to get the ultimate strength possible.

KEEP MODERN WITH
"STANDARD" PRODUCTS



RAILWAY AGE

Progress in Technology Offset by Growing Political Problems

The inspiring exhibition in Atlantic City last week of improved equipment and other products for railroad use—as well as the figures of railroad performance—show that there is no lack of continuing progress in the technological aspects of railroading. Railroad earnings figures, however, tell a different story. The political problems of the railroads have grown more involved and more expensive, with the net result that technological progress has scarcely been rapid enough to offset the mounting cost piled upon the railroads by politics. Little progress has been made in solving these serious political problems, and one reason is that insufficient economic incentive is provided to induce the necessary effort and study to discover means of dealing with them. Financing of such inquiry has to depend upon “angels”—that is, people or institutions with money, who do not have to look for an immediate return of their principal with a profit.

No Brakes on Technical Advances

The railroads produced 82 per cent more traffic units per man-hour in 1946 than in 1926, but they earned less than half as much net railway operating income in 1946 as they did in 1926. Certainly, the efforts to attain still further technological and managerial progress must continue, and be accelerated if possible—but it would not follow from that conclusion that no advance whatever should occur in dealing with the political and sociological problems of the industry—all of which are, actually, problems of relationships between people. If a man has an extravagant wife, it is a good idea for him to arrange to provide a large and growing income; it would be an even better idea for him to learn how to induce his wife to economize.

A few years ago somewhat of a sensation occurred in the railroad industry when a wealthy supply manufacturer, who died a bachelor, made several generous bequests to individual railroad men—but left the bulk of

his considerable fortune to the advancement of education in technology. He had made his money from the improvement, manufacture and sale of the physical tools of transportation, and it was not unnatural that continued progress in the aspect of industrial life with which he was most closely connected should have received first call on his generosity.

Is it not probable, however, that the future advancement of industrial technology may be threatened quite as much by ignorance and discord in political and social relationships as by a shortage of facilities for technological education and research? Is it not arguable that a man, with a fortune to bequeath and interested primarily in improvement in the physical factors of production, might in the long run contribute at least as much to the achievement of his objective by leaving a part of his assets to promote education and research in practical problems in economics, politics and sociology as in donating all of them directly to foster scholarship in technology? Technological progress and social progress ought to go hand in hand, lest a lag in the latter cancel out, and then some, the achievements of the former.

More Power Than Ability to Use It

Raymond Fosdick is president of the Rockefeller Foundation, one of the world's greatest benefactors of scientific and medical research. Writing some months ago in the New York Times Magazine, he observed that scientific research had now reached the point where further progress “may lead to social disaster rather than to social gain.” The answer to this threat, in his opinion, is not to “put the brakes on intellectual adventure,” but to recognize that “we are discovering the right things but in the wrong order. . . . The disproportion between the physical power at our disposal and our capacity to make good use of it is growing with every day that passes.” Continuing, he said:

"Our knowledge of human behavior and social relations is not adequate to give us the guidance we need. . . . What is needed is a broader basis of research, a more vigorous backing of objective and competent efforts to define and analyze the intricacies of human relationship."

He then went on to cite instances of specific accomplishments in this field (such, for instance, as the studies of the business cycle by the National Bureau of Economic Research)—but pointed out the discouraging fact that "there seems to be a widespread belief that we are all social scientists, all of us are economists." Actually, social problems are far more complex than those of the physical sciences and they are not going to "be solved by literary pontification, by speeches, by partisan appeals, by emotional surges or amateur efforts."

There is another obstacle, not mentioned by Mr. Fosdick, which stands in the way of research in sociology and economics, and that is the lack of an automatic reward for achievement in this field. In research in the physical sciences—especially at the practical level of technology—the developer of an improved method or device usually has a tangible property for which willing purchasers can be found. The man who might discover a system of dealing with public and employee relationships which would restore and preserve the attractiveness to private capital of investment in a railroad plant would, quite likely, do as valuable a service for his industry, his nation and the cause of human freedom and progress as one who would come upon an economical means of turning shale or some other common stone into fuel. But the discoverer of the cheaper fuel would have a device or patentable process which he could sell, while there would be no such marketable product in the hands of the successful searcher for a formula for harmonious human relationships in industry.

In other words, there needs to be an "angel," not motivated by the prospects for immediate personal profit, to finance the work of most inquiry in the social sciences, or nobody can afford to engage in it; and, as a consequence, the answers to social and political problems are slow in coming to light. They may, in fact, come so slowly that technological progress itself will be thwarted or terminated by political chaos.

Problems of Human Relationships

To be specific and strictly practical, what problems anywhere in the railroad industry are more pressing than such questions as the following:

What is the minimum economic information about the railroads which employees must have in order to comprehend that the industry cannot pay out in wages (and in necessary returns to attract needed capital) more than it takes in from customers; and what is the most practicable and economical method of imparting this essential information to employees?

To what degree has competitive transportation plant, built from tax funds and with less-than-compensatory use charges, dried up the volume of private capital available to the railroads—and how can this information be most effectively conveyed to the public in terms of its own selfish interest, so that remedial political action will follow?

There are lots of people with *ideas* as to the solution of such problems as these—just as there are plenty of people with ideas as to novel types of motive power. But it takes prolonged experiment to turn new ideas regarding motive power into practicable locomotives,

and certainly an equal amount of intensive research and testing would be needed to discover dependably effective means for solving the railroads' basic problems of employee and public relations. The point is that the purposeful and intensive search for improved motive power is actually going on, while the efforts to reach solutions of the problems of human relations are fragmentary, desultory and have mingled with them a lot of the "literary pontification, speeches, partisan appeals, and amateur efforts" decried by Mr. Fosdick. Yet, unless these problems of relations between people are solved, the fruits of technological progress stand to be dissipated in social and political conflict.

Somebody simply has to "angel" research and education in this latter category, since it yields no proprietary products, or the inquiry will not come about. The "angels" could be either philanthropic individuals or some association of the beneficiaries of these efforts. The benefits, while they do not become the saleable property of the people who do the research, are nevertheless large and substantial; they are enjoyed collectively, and there exists an economic incentive for an association of all the companies in an industry to finance this study which does not occur in the case of an individual corporation.

If neither philanthropists nor associations will undertake such inquiry, the only agency that remains to do it is the government, which seldom if ever produces a report in the field of the social sciences which does not betray a political taint. Somebody has got to cut this Gordian knot, and those who do it will certainly deserve and probably achieve general and enduring esteem.

An Opportunity for Another "Equation"?

There may be a definition of an engine dispatchment somewhere in the literature of railroading but when, the other day, an operating officer called up and asked for the definition the records at our disposal did not immediately enable us to comply with his request. The first half dozen railroad men we asked for help not only did not come up with anything specific but between them produced four definitions that had little in common. Why should there be any doubt about the answer to such a simple question as this? The answer is: the modern locomotive.

The time was, not so many years ago, when road locomotives belonged to a division and switchers worked eight-hour shifts. Being steam powered and not equipped with all the modern specialties that permit them to run "thousand-mile days" and, like Diesel switchers, stay away from the enginehouse "for weeks at a time," they showed up at a terminal with eight-hour regularity. Everytime they were called and left the lead track they became a "dispatchment."

To those whose duties require them to compile records for their management many of the costs of engine terminals—and locomotive operation—are related to the number of engines dispatched. If a certain terminal

handled 45 road locomotives and 15 switchers, it might easily dispatch, say, 135 engines in 24 hours on the old basis but now, when the road locomotives go to the other end of the line on *one dispatchment* and the switchers come to the house but once a month, the "double-or-nothing" question is: "How many engines does the house dispatch?"

This is but one of the traditional factors of railroading that has been completely upset by modern power and modern operation. The 1947 records of "cost per dispatchment" had better not be compared with the 1937 records for they won't mean anything—and here's hoping some mathematical genius doesn't sit up all night and work out a "dispatchment equation" that will prove of as little value as the well-known fuel equation. Diesel locomotives have certainly done things to railroading—all for the better.

What Price Per Diem?

Should per diem rental for freight cars be imposed at punitive rates or only at a figure to net the car owner a "fair return" for his cost of ownership? Of those railroads which have thus far come forward publicly with an opinion on this question, nine Class I roads, with a total car ownership of 493,983, have expressed opposition to a punitive charge, and seven, with a total ownership of 338,509 cars, are recorded as favoring it. In support of a punitive rate it is argued that it would prove an incentive to some roads to build more cars, and promote greater efficiency in their use. Some roads claim that, while they themselves own a fair share of equipment, other lines are not so provident, and prefer to rent cars rather than build them.

In general, those favoring a punitive rate look upon \$2 per day as a minimum. The Department of Agriculture favors this charge only for excessive detention, increased in severity for undue delay. If this proves unworkable, it favors the straight \$2 rate. Another modified plan, suggested by a western road, is that the \$2 rate apply only to new, semi-lightweight equipment incorporating the most modern features, to serve as an inducement to build modern cars. The Office of Defense Transportation and the Interstate Commerce Commission's Bureau of Service favor a much higher rate, and the proposed report of the commission's examiners suggests \$5, subject to prescribed conditions. In March, 1947, the latest month for which figures are available, two of the seven railroads favoring a penalty rate had a greater number of home ownership cars on line than foreign. The other five roads had a greater number of foreign cars than home cars on their lines. Of the nine Class I roads expressing opposition to the punitive assessment (and they are joined by 160 short lines represented by the American Short Line Railroad Association), all had a greater number of foreign cars on their lines in March than cars of their own ownership.

Those who oppose the penalty rate offer many cogent arguments in support of their position. A punitive rate, they contend, would result in wasteful transportation produced by special handling of empty foreign line

cars to home roads. It would encourage some railroads to enter the car rental business and purchase an excess of equipment. With a recession in traffic, roads which had acquired high ownership to avoid the penalty charges would be plagued with surplus cars, and would seek to load them off line for profit. It would penalize those roads which assemble "banks" of cars for heavy seasonal movements, such as the fleet prepared for the wheat harvest. The increased per diem rate would seriously burden the short lines, which necessarily have small car ownership. By creating a need for "priority" movement of foreign cars as against system cars, the punitive per diem would cause an overall reduction in efficiency. Priority handling proved disastrous during World War I and was held to a minimum during the recent war.

In addition, it is pointed out that the penalty rate would discriminate against heavy terminating roads and bridge carriers, which have come to rely on the excess of loads coming to their lines to provide equipment for outbound loads. Roads with a heavy terminating business are obligated, under Car Service rules, to return foreign cars under load to home territory in so far as volume of traffic permits. For such a road to load its own cars and send foreign cars back empty would be a violation of Car Service rules. The penalty per diem would be, in effect, a gratuity paid by terminating roads, bridge lines, and short lines, to heavy originating roads, which tend naturally to have a hire-of-equipment credit balance.

To all of these objections there is the counter-argument that, when per diem is held at a rate near to the actual cost of car ownership, the economic incentive to ownership may be insufficient to provide the industry as a whole with an adequate car supply. It is easier to state the problem than to solve it, but a compromise must be found; and doubtless it will be found, because there is no phase of railroading which has men in charge who are more expert at their business than the car service officers.

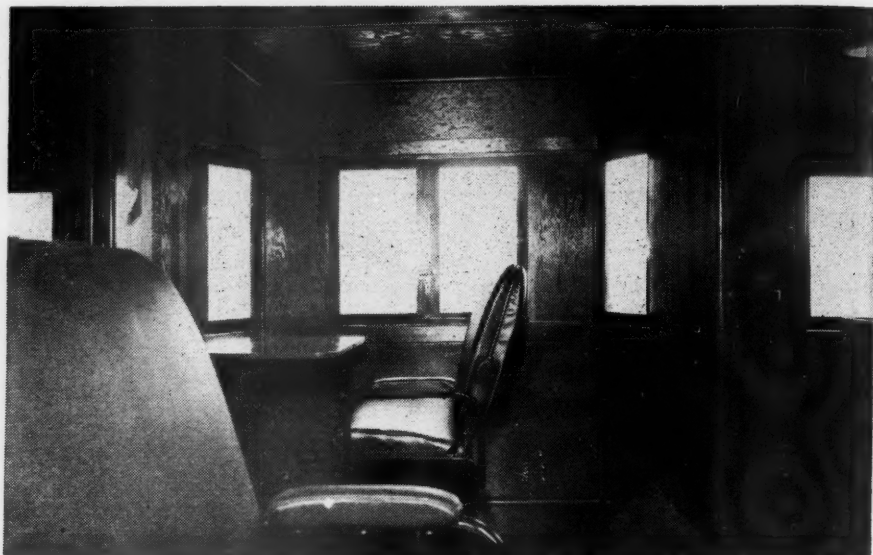
How Big Is the Car Shortage?

Chairman Warren Kendall of the Car Service Division, A.A.R., believes the table published on page 1247 in our June 21 issue with the editorial "Who's to Blame for the Car Shortage?" may give an inadequate impression of the seriousness of the car shortage, especially in 1946. In this table average daily car surpluses (or shortages) were shown for the period 1920-46, the figure used being the *net* surplus (i. e., surplus minus shortage). On this basis, our figures showed an average surplus of 10,000 cars in 1946 when, actually, there was a car shortage throughout most of that year.

The purpose of our tabulation was not primarily to show the actual car situation at any one time, but to *compare* the situation from year to year. Since we used the "net" figure for all years shown in the table, like was compared with like. To portray the actual situation as regards the degree to which the railroads are meeting the shippers' needs, the figure indicating gross shortage, without any deduction of surplus, would doubtless be a happier choice—but, again, our purpose was comparison, not a detailed exposition of the situation as of any particular year.



For ease in getting on or off the end-platform steps are similar to those used on passenger cars



The bay section with reversible table seat

S. P.'s All-Steel

Fifty units built by the American Car & Foundry Co. have bay sections equipped with reversible chairs and tables

IN May the Chicago plant of the American Car & Foundry Co. delivered 50 bay-window cabooses, 35 for the Southern Pacific and 15 for its subsidiary, the Texas & New Orleans. They were constructed mostly of copper-

bearing open-hearth steel and have an all-welded underframe, riveted sides and roofs and a welded end frame to which the sheets are attached by riveting. The bay section is completely welded but it is fastened to the car body by rivets.





Above left—(Left to right) Bunks, coal box, water tank and stove. Above right—The stationary end seat and the refrigerator

Bay-Window Caboosees

The cars are 41 ft. 1 $\frac{3}{4}$ in. long over the coupler pulling face, 10 ft. 7 $\frac{3}{4}$ in. wide at the bay section, and 8 ft. 7 $\frac{3}{4}$ in. over the body side posts. From the rail to the top of the running board is 12 ft. 4 in. and the distance between end linings is 32 ft. 0 in.

In the S. P. cabooses the interior furnishings consist of two upper and lower bunks, a coal box, wash water tank, stove, dish cupboard, lantern locker, five clothes lockers, stationary seats at the ends, a large-capacity refrigerator, sink, water cooler, conductor's desk and a utility locker. The T. & N. O. cabooses have the same furnishings except that the upper bunks are eliminated and three lower bunks are used.

The sinks are replaced by a wash-stand and no refrigerators are installed in these cars. All cars are supplied with three kerosene lamps.

The bay sections are alike in both cars and are fitted with reversible seats and drop tables. All seats in the cars are covered with imitation leather and have foot rests. In addition to the large tool cellar under the car the compartment under the lower bunks is used for tool storage. The bunks have imitation-leather-covered mattresses.

The flooring consists of a 1 $\frac{3}{4}$ -in. sub-floor laid crosswise and a $\frac{7}{8}$ -in. face-floor laid lengthwise with building paper between the two. Plywood is used for all interior lining with $\frac{1}{2}$ -in. building board used in the sides and ceiling for insulation.

The center sills are the standard A.A.R. Z-26 weighing 36.2 lb. per ft. with the center seam welded. The bolsters are made of $\frac{1}{4}$ -in. plates welded to make a box section and the cross-bearers, welded into an I-section, are also of $\frac{1}{4}$ -in. plate.

The side sills and buffer sills consist of 6-in. Z-shapes. The side posts are A.A.R. Z-27 weighing 5.1 lb. per ft. and side plates are of 4-in. by 3 $\frac{1}{2}$ -in. by $\frac{5}{8}$ -in. angles. The side sheets, including the bay, are of No. 12 gage copper-bearing hot-rolled steel, riveted to the side posts.

The riveted roof is made of No. 13 gage copper-bearing hot-rolled sheets with 3-in. by 3-in. by $\frac{1}{4}$ -in. carlines

and 3-in. by 2 $\frac{1}{2}$ -in. by $\frac{1}{4}$ -in. angles running longitudinally at the side plates.

The cars have Westinghouse schedule AB-10 air brakes and Equipco vertical-wheel type hand brakes. Creco four-point brake-beam supports and bottom-rod guards are used.

Type E couplers are installed with the Miner A-28-XB draft gears. The trucks are the Barber-Bettendorf swing-motion type with 4 $\frac{1}{4}$ -in. by 8-in. A.A.R. axles and bearings. The transoms, bolsters and side frames are cast steel. Spring seats, spring-plank bearings, swing hangers and swing-hanger bottom bearings are forged. Double elliptic springs and Stucki roller side bearings are used.

Partial List of Materials and Equipment on S. P. Bay-Window Caboosees

Trucks	Standard Car Truck Co., Chicago
Wheels	Bethlehem Steel Co., Bethlehem, Pa.
Springs	American Locomotive Co., New York
Axles	Carnegie-Illinois Steel Corp., Pittsburgh, Pa.
Dust guards	Ajax-Consolidated Company, Chicago
Draft gear	W. H. Miner, Inc., Chicago
Couplers and yokes	National Malleable & Steel Castings Co., Cleveland, Ohio
Air brakes	Westinghouse Air Brake Co., Wilmerding, Pa.
Brake beams	Chicago Railway Equipment Co., Chicago
Hand brakes	Equipment Specialties Division, Union Asbestos & Rubber Co., Chicago
Brake shoes	American Brake Shoe Co., New York
Building board	Johns-Manville Sales Corp., New York
Bay windows	Morton Mfg. Co., Chicago
Seats, reversible	Heywood-Wakefield Co., Gardner, Mass.
Water coolers and wash-water tanks	Henry Giessel Co., Chicago
Paint	Sherwin-Williams Co., Cleveland, Ohio
Running boards	Morton Mfg. Co., Chicago
Lamps	Adams & Westlake Co., Elkhart, Ind.
Stoves	Estate Stove Co., Hamilton, Ohio

The Case for Agreed Rates—a Summary

Under some conditions they will benefit both carriers and shippers—Competent regulation can obviate dangers

IN considering the problems of pricing transportation to yield compensatory revenues to the railroads, while providing charges attractive to particular shippers and equitable to all users of transportation, the possibilities afforded by rates made by contract or agreement between shippers and carriers under governmental regulation should be explored. This method of making freight rates has been adopted by the railroads of a number of countries including, notably, Great Britain, Canada, Australia, India, France, Norway and Denmark.

In substance, this method of rate-making consists of the establishment of a single rate per unit of shipment—100 lb. or ton—for all shipments, sometimes without regard to the commodity or distance, in connection with all or a specified ratio of the shipper's freight traffic for the period of time in which the contract is in effect. Such agreements are subject to public notice and the approval of the government transportation regulatory body having jurisdiction.

The making of a single-sum freight charge for all shipments regardless of commodity or distance transported is not so radical a departure as is sometimes supposed. Many carload commodity freight rates in the past have been established on group or other bases with consideration to average conditions of movement and with the assurance, expressed or implied, that the carriers establishing the rates would "enjoy the traffic." Other rates have been established upon bases lower than normal in consideration of rates upon other movements of the same or different traffic with the understanding that the carriers would "take the skim milk with the cream."

The Interstate Commerce Act requires that the rates of interstate common carriers subject to the act must publish and file their rates in tariffs and that the rates so published and filed must be open to the public and available to all railroads alike. In the case of the railroads, the only exception of which the present writer is aware is the establishment by the railroads of special con-

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tract rates for the transportation of circus, exhibition and show outfits. Motor contract carriers, however, are authorized by the Interstate Commerce Act to establish minimum rates upon the basis of contracts entered into with shippers, provided the schedules setting forth the minimum charges actually maintained and the rules which govern them are filed with the Interstate Commerce Commission.¹

The commission has jurisdiction over such contracts and the minimum rates so established and may investigate and suspend the operation of proposed rates. The burden of proof to show that the minimum rates and charges are reasonable rests upon the carrier proposing them.² In like manner, domestic contract carriers by water, subject to the Interstate Commerce Act, may establish contract minimum rates, provided the schedules setting forth the rates and the applicable rules are filed with the commission and kept open to public inspection. These rates, like motor carrier contract rates, are subject to the jurisdiction of the commission and new proposed minimum rates may be suspended and investigated by it—the carriers proposing the rates assuming the burden of proof to justify their reasonableness.³ Freight forwarders do not have the privilege of establishing rates by contract.

Advantages of Agreed Rates

Agreed rates have certain advantages to shippers and carriers alike. To the carrier this plan of rate-making has the attraction of assuring to it all of the shipper's traffic specified in the contracts. Exceptions are sometimes made of such traffic as: local deliveries made in the shippers' vehicles; small packages transported by parcel post; or shipments by water. Under this plan the carriers' costs of classifying and billing of ship-

ments are reduced, because all shipments are made at the same rates per weight unit. The carriers need only keep a record of the date of each shipment and its weight, and bill the shipper at intervals on the basis of the total weight at the unit rate. Savings are made also in post-shipment audits ordinarily necessary to discover undercharges or to confirm overcharge claims.

Another advantage is the elimination of the clerical and supervisory expense incident to the settlement of disputes concerning the classification or tariff ratings of the goods and the correct rates applicable—work which requires a considerable part of the time of the staffs of carrier traffic departments. The questions of classification and tariff application and interpretation arise not alone between carriers and shippers but between the traffic departments of different carriers and between different offices of the same carriers.

Agreed rates make it possible for carriers to meet competition from other railroads, trucks, or water craft on an overall basis, rather than by establishing competitive rates on various commodities at different competitive points of origin and destination.

These rates also permit a railroad to meet the competition of the transportation services operated directly by the shippers. These are usually motor truck or steamship services, but it could be extended to include any other type of transportation owned and operated by producing, manufacturing or distributing industries.

Shippers receive the major advantage of rates which are less than the average of the rates paid upon the same traffic upon the basis of the class rates, exceptions-to-the-classification rates, or commodity rates applicable to the same shipments.

Like the railroads, the shippers are able to save in the clerical costs incident to rating and billing individual shipments; auditing and paying individual freight bills; checking of bills to discover, prepare and collect overcharge claims; the verification of undercharge claims; and determining the application of classification and tariff ratings.

Another advantage of agreed rates to shippers is their usefulness in controlling and anticipating for the period of the life of the agreements the prices that

EDITOR'S NOTE: This is the concluding article in a series—the most recent preceding article whereof appeared in our April 26 issue—in which Dr. Wilson has thoroughly explored the possibilities of freight rates based on "agreed charges" and on concessions for large-volume shipments.

¹ Interstate Commerce Act, Part II, Section 218, as amended.

² Ibid., Part II, Sections 218 (c) and 216 (g).

³ Ibid., Part III, Sections 306 (e) and 307 (g).

they shall have to pay for transportation. Forearmed with this knowledge, shippers can with confidence plan production and distribution schedules for the future. This plan of rate-making makes it possible for industries to obtain transportation service at average prices comparable with the cost of providing their own transportation and give them this choice on relatively even terms.

A still further advantage is the ability of shippers to meet their commercial or market competition at a number of points without the necessity of adjusting their distribution practices at many individual points and of withdrawing from certain competitive markets because of adverse rates.

Finally, such rates are useful in fixing market prices without resort to single or multiple-basing-point prices made necessary because of different freight rates available to them and to competitors at other shipping points.

Some Problems

As counterpoises to the advantages of agreed rates to shippers and carriers there are problems or disadvantages to which consideration should be given.

To the carriers, the agreed rates may produce lower revenue per individual shipment than the revenue which would accrue for the transportation of the same traffic at standard tariff rates. The carriers' total revenues should be increased, however, because they get all the traffic embraced in the agreements and not only the traffic where they can and do effectively meet the competition of other carriers or the industries' own facilities at equal or lower rates or costs.

Another problem involved in agreed rates is the necessity for reviewing and sampling the arrangements periodically to learn of any changes in the nature of the shipments, the weighted average length of the hauls, or other characteristics of rate significance so that appropriate adjustments may be made in the basic charges. The arrangements must be policed in order to avoid breach of the agreements, which would occur if shippers should give the carrier only those shipments where the agreed rates were less than regular tariff rates, shipping the balance at the tariff rates of other carriers. This practice would set up a process of selection against the contracting carrier, which would be ruinous as well as unethical.

The shippers sacrifice in return for agreed rates their privilege of using any type of transportation and any particular carrier they choose. The relinquishment by the shipper of this right is a disadvantage, not only in adapting the transportation services to the requirements of individual shipments, but as it affects his bargaining position in seeking

rate adjustments. While the agreed rate contracts are in force, shippers cannot take advantage of rate reductions which may be made for the carrier's ordinary service.

Finally, looking at the matter from a broad public viewpoint, a nice balance must be maintained by the government regulatory body to insure that the agreed rate arrangements are equitable to the participating shippers and carriers, while not being unduly preferential of such shippers and carriers, nor unduly prejudicial to other shippers and carriers. This requires that the arrangements, after having been tentatively agreed upon by the parties, be submitted to the regulatory body for scrutiny. Public notice should be given of such applications; copies of the agreements should be made available for public inspection; and any shipper or carrier who believes that his reasonable self-interest is adversely affected by the arrangement should have adequate opportunity to present his objections. If the public interest generally or the interests of other shippers or carriers *prima facie* appear to be adversely affected, it would appear to be equitable that public hearings be held by the regulatory body.

Whatever may be the merits or demerits of agreed freight rate arrangements, they should be open covenants, openly negotiated, and publicly approved.

Unconventional Rate-Making

An examination of some actual instances of departures from the conventional patterns of class and commodity freight rates—including exceptions-to-the-classification and column rates, with the time-honored distinctions between carload and less-than-carload rates—is appropriate at this time when the carriers need traffic which will yield adequate revenues, and shippers require reasonable rates which will assist in the difficult problem of reconstruction of industry and commerce.

The function of freight rates is to yield to the carriers revenues large enough to pay all reasonable costs of operation, plus a fair return upon fair value with proper provision for fixed charges and dividends, with provision for maintenance, depreciation and taxes—in short, earnings sufficient to attract the supply of new capital necessary to keep the system in condition to meet present and future requirements. The function of freight rates from the shipper's point of view is to provide a basis of charges reasonable *per se* and free from unjust and unreasonable preference or prejudice, or unjust and unreasonable discrimination. It is imperative that the rates be as low as is consistent with adequate service and the sound financial condition of the carriers, and

relatively equitable among competing industries. The preservation of reasonable and equitable relationships among commodities, markets and industries is an essential feature of any proper rate structure.

In order to insure rates which are reasonably low, and yet high enough to afford the carriers an opportunity to earn fair compensation, all available means of saving unnecessary expense should be explored. The competition of other carriers should be considered as a factor of fundamental importance, and rates should be made to meet such competition without going below out-of-pocket costs of the less efficient carrier, which seeks to meet the competition of the relatively more efficient carrier. If rates are made to meet competition, the carriers making such rates should have some assurance that these rates will not become "paper rates," useful only as a means of obtaining even lower rates from another carrier. In like manner, rates made to meet or preserve industrial or market competition should be made so as to give the competing shippers or consignees reasonable assurance that the rate relationships will not be disrupted by horizontal or other rate changes which disregard the sensitivity of the competitive rate relationships.

Four Types of Novel Rates

Railroads in several countries have been giving consideration to departures from conventional rate-making which will attract traffic while yielding revenues more than sufficient to cover out-of-pocket costs; enable them to reduce costs in handling the traffic; and give them reasonable assurance that the rates so made will actually move and retain the traffic.

These plans of rate-making include: the agreed charges made by the British railways, the agreed charges made upon slightly different pattern by the railways of Canada; the special rates made by railroads of the United States authorized by Section 22 of the Interstate Commerce Act; special rates contingent upon annual or other periodic minimum quantities of goods shipped or received; and trainload or multiple-carload rates.

The number and varieties of these extraordinary rate bases indicate that there is continual searching for freight service pricing practices which will provide revenues to the carriers, reduce solicitation, billing and operating expenses, and, at the same time, afford customers reduced rates, improved services, or decreased billing and other shipping expenses.

There is no magic in "agreed charges" as they are used in Great Britain, or as applied in Canada. There appears to be nothing that is, or can be, achieved

by agreed charges that cannot be accomplished by well-constructed commodity rates, except, perhaps, stronger assurance that the participating carriers will receive all, or the agreed share, of the traffic upon which the rates are made. This is a highly desirable feature from the standpoint of the carriers, assuring them revenue producing traffic as a *quid quo pro* for the charges agreed upon, and affording them protection against the use of the commodity rates they establish as levers to induce competitive carriers to establish even lower rates. Agreed charges cannot be used as "boomerang rates" or as "paper rates."

Summary of Advantages

The advantage of agreed charges may be summarized as follows:

1. They assure the shippers that the level of the charges will tend to approximate the lowest rates, consistent with covering the out-of-pocket costs of handling the particular traffic or a share of full allocated costs, and with meeting the alternative transportation service costs available to shippers—which may be the charges of competitive carriers, or the cost of performance of identical service by private trucks or vessels.

2. Once the agreed changes are negotiated, the carriers are saved the expenses of competitive solicitation. It should be noted, however, that this does not dispense with the need for service solicitation, necessary to maintain continuing harmonious relationships between carriers and their patrons.

3. The use of agreed charges, under the British plan of a single average rate, or a percentage of the invoice value of the goods shipped, enables both the carriers and shippers to reduce the clerical expenses incident to the classification and rating of individual shipments, billing of each consignment, and individual shipment accounting.

4. If an average claim settlement basis is used, based upon the percentage of loss or damage experienced with respect to the traffic as indicated by the carriers' and shippers' records checked by periodic inspections, shippers are saved the expenses of preparing, filing and collecting claims, and the carriers are saved the costs of receiving, investigating, and paying individual claims for loss, damage, or delay.

5. The eliminating of individual classification and rating of shipments obviates the necessity of auditing the billing of each shipment in order to discover, file and collect overcharge and undercharge claims. The periodic statements rendered by the carrier need show only the dates of the shipments and the units of weight for verification. The total weight or other unit for the period

covered by the billing is shown, and this unit is then multiplied by the agreed charge to produce the total sum due. Such a statement can be prepared by the carrier and checked by shippers or consignees easily at little clerical cost.

6. The negotiation of agreed charges enables both shippers and carriers to consider every element and item of cost, and to make adequate cost and alternative charge studies before arriving at the agreed charge.

7. Shippers and carriers alike are able to adjust the agreed charges from time to time to make provision for changes in the cost of performing the services with due consideration for changes in the price level, volume of traffic, and other factors influencing freight rates.

8. Agreed rates may be made with due regard to the volume of traffic, shipped in individual consignments as well as periodically, to the extent that such quantities of traffic influence the costs of performing the services, or the value of the services to the shippers.

9. The requirement that the same basis of agreed charges must be made available to other shippers of identical traffic upon application, and that the agreed charges may not be established to the detriment or prejudice of competing shippers, is necessary to protect shippers against unfair preference and prejudice.

10. Similar consideration of the relative costs and competitive interests of other carriers of the same and different types as those establishing agreed charges is necessary to avoid destructive competitive practices.

A Summary of Dangers

A study of agreed charges and other departures from the conventional patterns of rate-making serves to indicate that, in the absence of effective public regulation, this approach to pricing might be used as a devastating competitive weapon. For instance:

1. It is apparent that agreed rates could be used as a device to shut out all competition by a carrier willing to go to extreme limits. Effective public regulation is necessary to protect competitive relationships and to insure to shippers effective inter-carrier competition.

2. Agreed charges, unless comprehensively and fairly regulated, could be used unduly to discriminate among shippers, types of traffic, or communities.

3. In the absence of regulation, this plan could be used to prefer large shippers and to prejudice smaller ones; to assist shippers of one type of commodity and to handicap other traffic; or to prefer certain industrial or marketing areas to the detriment of others.

4. The opposition of other carriers, or of other shippers or shippers organi-

zations, could be used unfairly to obstruct the establishment of reasonable and compensatory rates by carriers willing to establish them, and shippers willing to have them established, unless the negotiation of the rates is subject to discerning and impartial public regulation.

5. The widespread use of agreed charges by one carrier or type of carrier might tend to influence other carriers of the same or different type to use agreed charges although they might prefer not to establish them. The use of this basis of rate-making is voluntary, so that this danger may be less important than may be assumed.

6. The use of agreed charges might spread, tending to supplant other methods of rate construction. To the extent that the use of agreed rates may be advantageous to carriers and to shippers without unjust and unreasonable discrimination, or undue preference or prejudice, it does not appear that this is an important limitation upon the value of the scheme.

Need for Regulation

An analysis of the various plans of agreed and other bases of special rate-making serves to indicate two aspects of the problem which should be emphasized—first, the need for full consideration of all of the pertinent factors in rate-making in the light of present-day economic conditions and of the state of the law; and, second, the indispensability of adequate and effective public regulation.

The method by which the rates are made—whether as agreed rates of the British type, agreed charges of the Canadian type, contract rates such as those made for the government agencies under Section 22 of the Interstate Commerce Act, or other plans—is less important than that due consideration be given in making the rates to the factors which are significant in determining the reasonableness and relative fairness of the rates including:

1. All appropriate items of cost;
2. All relevant factors of the charges of other carriers;

3. The saving to carriers by changes in operating, traffic, accounting, and other practices, including classification, rating, billing, auditing, and claim settlements;

4. The relative costs to shippers of handling traffic when shipped and received by different agencies of transportation, as items in the total cost of handling freight;

5. The observance of out-of-pocket costs of the carriers as minima below which rates should not be made by the carriers;

6. The reasonable competitive interests of other carriers of the same and other types in fixing rates so as to afford them a fair opportunity to establish competitive rates, if such rates are justifiable considering the competitive carriers' services and costs;

7. The establishment and maintenance of rates so as to establish and maintain reasonable rate relationships between shippers, areas of production, markets, and commodities;

8. The consideration in establishing the rates of the competitive interests of other shippers and consignees who use the same and other carriers' services;

9. The adjustment of rates and charges, upward or downward, as may be necessary or desirable to adjust rates to changing price levels, costs and economic conditions which affect the carriers' costs of performing the services or the expense of the shippers or consignees;

10. The availability of equitable rates upon the same or related bases to all who can demonstrate that they are entitled to them;

11. The establishment of rates after public hearing in which all parties of interest are afforded ample opportunity to appear and to be heard;

12. The establishment of rates subject to the critical review of a government regulatory body adequately endowed with powers to ensure that the rates are and will be reasonable and otherwise lawful;

13. The establishment of freight rates upon bases which give reasonable but not excessive consideration to the quantities shipped, either at one time or over a period of time, taking into account the savings in transportation costs by reason of the quantities transported, while giving consideration to the shippers of smaller units or aggregate quantities;

14. The establishment of proper relationships between carload and less-than-carload rates so that each type of service defrays its proper share of costs and does not create a deficit which must be made up by the other type of service; and

15. The preservation of the rights of shippers and carriers to have the lawfulness of the rates considered in proceedings before the Interstate Commerce Commission, or by litigation in the courts.

Freight rate-making is a pricing procedure and as such it is highly volatile. There is danger that the patterns of rate-making may become undesirably rigid and that more attention will be paid to following traditional practices in making rates than to making sure that the rates serve the revenue needs of the carriers and the industrial and traffic requirements of producers, distributors

and consumers. The end to be sought by the carrier and the public is a pattern of freight rates which yields the carriers revenues sufficient to cover operating expenses and a return at the market rate on the capital thus employed—assuming honest and competent management. Shippers are equally entitled to freight rates which are adapted to their needs and relatively reasonable and

equitable to competitive shippers, traffic and locations, while being sufficiently flexible to take account of what the traffic can bear. The methods by which rates are produced are less important than these end-products. An orderly and symmetrical rate structure is desirable, but rates which will allow commerce, industry, and the carriers themselves to thrive are indispensable.

Employees' Timetable Tells How to Treat Passengers

Chicago & Eastern Illinois reminds its employees of the little niceties which help to add revenue and to soothe the sensibilities of its passengers

THE Chicago & Eastern Illinois has, in recent years, adopted the custom of setting forth its policy in regard to the relationships between employees and passengers and the duties of passenger train conductors in a prominent position in its official employees' timetable.

On page 2 of the road's timetable No. 31, effective March 2, for example, there appeared the following statement of "Policy in Passenger Relationships":

"The new schedules contained in this timetable represent an effort on the part of the C. & E. I. to improve train service in the post-war period. One of the most important phases of present-day service is on-time performance and everyone concerned should do everything possible to see that our customers are not disappointed in their expectations. By maintaining regular on-time performance we can develop the confidence of the postwar traveler and shipper in our service. The passenger traffic of any railroad is built upon the good will of the traveling public toward the facilities and service of that road.

Where "Good Will" Begins

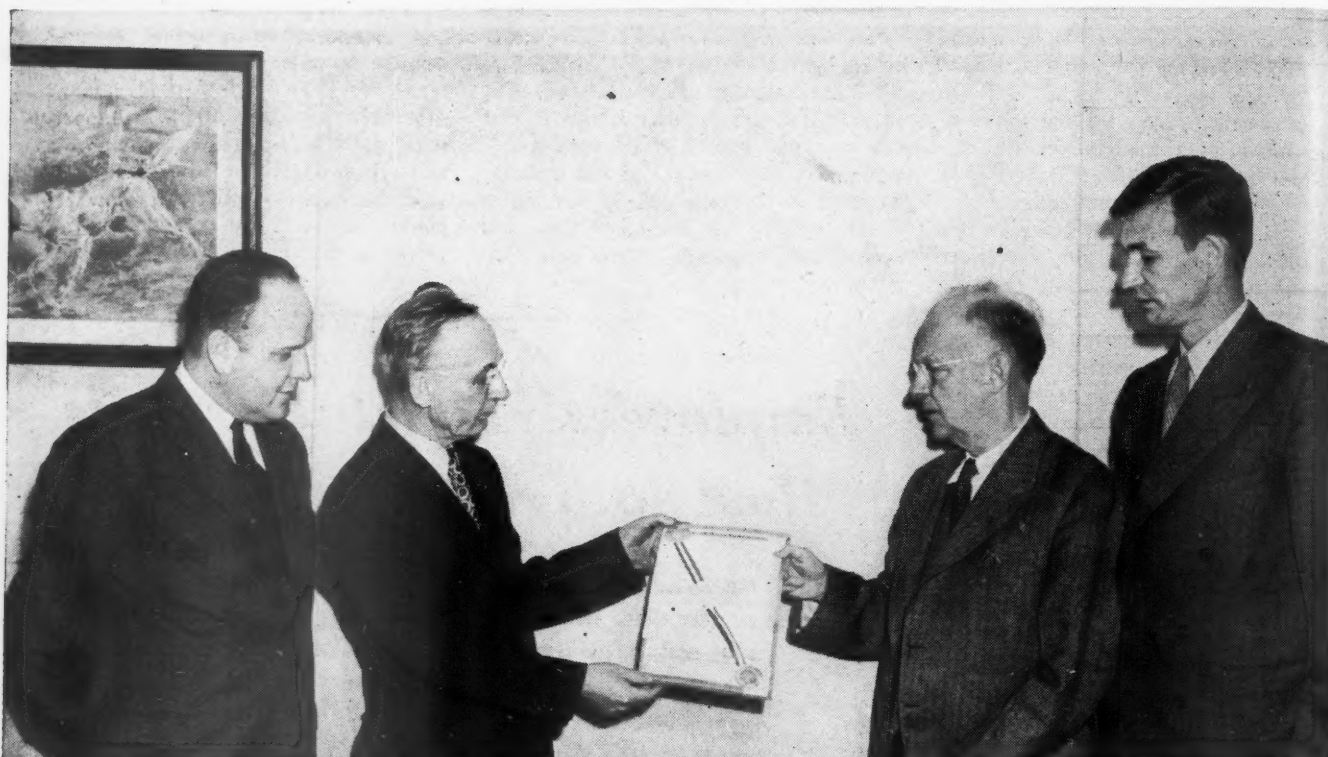
"The reputation of the C. & E. I. for courtesy and for a friendly interest in its passengers' well-being—as well as its future good will—is made on the passenger trains themselves. Our train conductors and their staffs represent the company as hosts to the travelers on their trains. It is their courteous attention to the needs and wishes of passengers that makes them feel at home and want to ride the C. & E. I. on trips to come. Let all of us who have contact with the public be constantly mindful of this."

The timetable goes on to set forth six separate instructions for passenger train conductors with regard to direct dealings with passengers. Conductors are told, for example, that they have the duty of seeing to it that undue noise or disturbance in coaches is avoided, especially on night runs; that passengers be so informed and advised that confidence is promoted and their anxiety relieved; that they should make a special effort to answer all questions fully regarding the cause and extent of unusual delays. Says the timetable: "Most passengers will readily accept a condition they understand; and if a train is running late, Pullman and dining car forces should be advised of the circumstances, so that they may answer passengers' questions intelligently."

Pride in Appearance

All C. & E. I. employees riding on passes are informed that in the event trains are crowded, revenue passengers must have preference in accommodations. "It must be borne in mind that our passenger trains are operated on the revenues from passenger traffic, and that passes are issued to C. & E. I. employees and their families subject to accommodations available."

Regarding the general appearance of trains, the timetable states: "Every passenger train has a personality of its own. It can be inviting, hospitable and pleasant, or slovenly and unattractive. Much depends upon the spirit and teamwork of its staff. It is the opportunity of the conductor to develop a train operation which will make it popular with the traveler and a subject of pride with his staff."



A Railroad Helps in Promoting Improved Forestry Practices

(Left to right) Harley Langdale, Jr., and George B. Cook, chairman of the forestry and naval stores committee and president, respectively, of the Valdosta and Lowndes County (Ga.) Chamber of Commerce, this spring received a 10-year free lease on 465 acres of forest land owned by the Atlantic Coast Line, represented on the occasion by R. J. Dess, vice-president—traffic, and Paul W. Wright, industrial forester.

Selling Service Has Many Angles

Promotion of traffic includes not only solicitation and tariff and rate advice, but also the active improvement of shippers' opportunities by railroad agricultural and industrial development staffs

IF there ever was a time when the railroads' only salesman was the fellow who passed out cigars, told stories and slapped backs, that time has passed into history. The railroads' sales departments know in this era of relentless competition in transportation that they must do more than call their customers, actual and potential, by their first names to get their patronage.

The railroads are offering service at an advantageous price. The railroads' salesmen know how that service can be fitted to the shipper's requirements, and they will not lose many opportunities to give that information to the shipper. They can, and do, give advice on rates and routes and tariffs and improved facilities and new markets. But that is not all they do. They study the particular requirements and particular advantages of each large shipper, in order that he may receive the best sort of service the railroads can provide. And they

devote a great deal of time and energy and ingenuity to the development of markets and improvement of production for the small shipper—the local industry and the farmer whose prosperity and expansion so greatly benefit the railroads and the communities on which the railroads' business depends. They try to devise ways to save their customers money and to enlarge the benefits they derive from railroad freight service.

Recent advances in the service of the railroads' sales departments include such developments as the general merchandise traffic organization of the New Haven, being set up to coordinate the customary solicitation and sales functions of the traffic department with the actual handling of l.c.l. freight; the siding-to-siding follow-up of carload shipments provided by the Baltimore & Ohio's recently inaugurated "Sentinel Service"; and the container engineering service by which the Union Pacific

helps its customers get better packaging and a minimum of breakage and damage in transit.

In the ordinary routine of traffic department service the railroads afford shippers of many commodities, particularly perishables, opportunities to take advantage of shifting demands for produce, price fluctuations, and other unpredictable conditions by liberal arrangements for the reconsignment and diversion of shipments en route. Shortages of equipment, as well as government and A. A. R. Car Service Division restrictions, currently impose some limits on the full development of these forms of railroad service to shippers, but the railroads' salesmen keep shippers informed of opportunities in this direction.

As a result of their wartime experiences, when they were expeditors and trouble-shooters on call to go all over their railroads, all over the country in

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fact, to keep traffic flowing freely, traffic solicitors are much better informed than they ever have been about the character of the territory served by their railroads and their connections, and this knowledge, often broadened by "refresher courses" planned to relate what they have learned to the needs of their localities, is being employed to their customers' advantage in securing more profitable or broader markets and in finding new locations for industries and more promising opportunities for the individual who seeks an opening for a new business or a more productive farming operation.

Industrial Agents Busy

With the restoration of more normal competitive and marketing practices following the end of the war and its restrictions and rationing programs, the industrial and agricultural development departments of the railroads have broadened their activities and renewed their efforts to develop their territories. New industries have located along the lines of practically every railroad, both the cause and the consequence of a great deal of activity in the railroads' industrial traffic organizations. These railroad activities have a wide range—even including studies and assistance in the proper location of new highways so they will serve rather than impede the best development of industrial property.

Railroads serving the South have been very active in encouraging the enlargement and diversification of the industries and agriculture of their territories. The Southern, for example, conducts in South Carolina a model forest of some 11,000 acres (originally acquired a century ago to provide timber, ties and locomotive fuel), where experiments are under way in tree propagation, fire prevention, and good forestry practices. The Atlantic Coast Line recently leased free to the Valdosta (Ga.) Chamber of Commerce a nearby 465-acre forest tract for the establishment and development of a demonstration forest where small land owners may discover the possibilities of small forestry plots on individual farms and acquire scientific and practical pointers about growing productive pine trees.

In the opposite corner of the country, in western Oregon and western Washington, agricultural development agents of the Northern Pacific are promoting irrigation—and greater crop production—in areas where the average annual rainfall ranges from 30 to 60 in. Despite the fact that flood prevention and drainage are among this section's major problems, there is very little precipitation in the three summer months when it is most needed. The railroad's agents,

therefore, are active in promoting so-called supplemental irrigation during this period, and it has been shown that this practice will double the yield and improve the quality of the product of pastures, berry patches and vegetable farms.

Some years ago a small group of farmers in the grain and livestock area of western North Dakota, entirely away from the commercial potato producing section, were shown by a Northern Pacific agricultural agent the possibilities in the production of foundation (disease-free) Bliss Triumph seed potatoes for replanting by commercial growers in the congested potato area. Such an original source of pure seed detached from the main production district was needed badly. From a 10-acre beginning by a half dozen grain farmers, who knew nothing about growing potatoes, the project has developed

to a 1,000-acre crop produced by growers who now have learned the fundamentals of seed spud culture.

Annually nearly 200 carloads of the disease-free seed are bought by seed producing growers located in the principal potato area of the Red River valley of the North, who first increase the new seed on their own farms and then distribute the increase not only among North Dakota and Minnesota commercial growers but also sell some to commercial growers all over the United States—enough to plant over 100,000 acres every year.

Agriculture Fostered

The Burlington serves a large area of semi-arid country where the further development of agriculture depends on irrigation. Among the steps taken by that road's department of industry and

FRESH
OYSTERS!

BY WESTOVERS'
AMBOY LINE

Through by Express on the
NEW YORK & ERIE RAILROAD.

For Sale Here,
And by the Proprietors, in all the Principal
Towns on the New York & Erie Railroad, and also on the Chenango Valley, from
Binghamton to Utica.

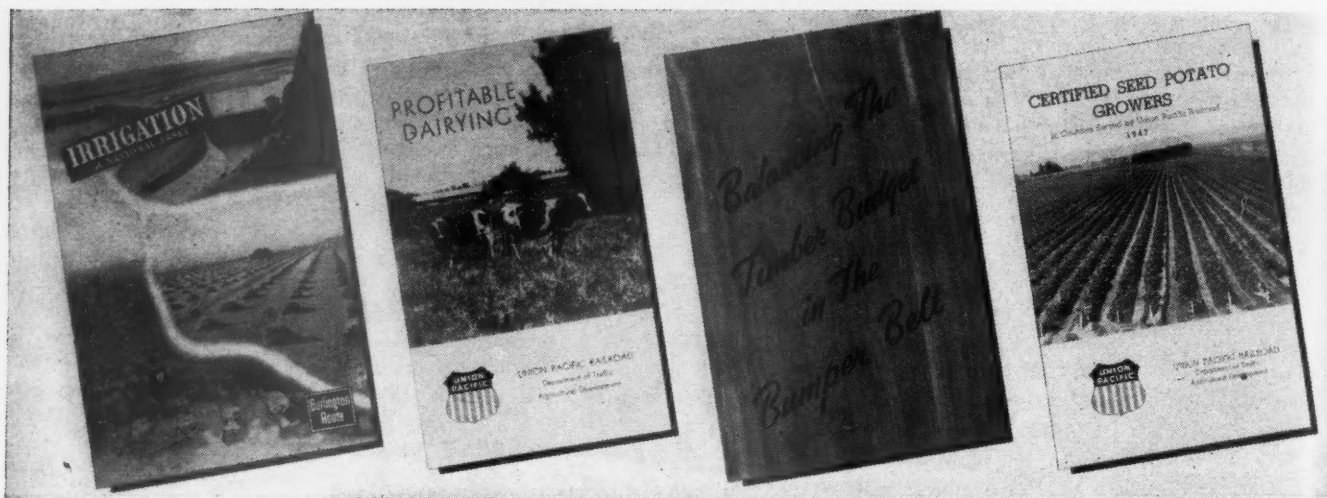
Customers dealing with this Line shall be sup-
plied regularly, according to order, through the season, with the best of **AMBOY**
OYSTERS, at the lowest possible prices.

Sept. 10, 1853. C. & R. WESTOVER.

(From Fairman's Job Printing Office, Elmira.)

From the Grolier Club Exhibit of the Iconography of American Industry

The railroads are old hands at employing advertising to broaden their customers' markets



With attractive, widely-distributed literature and sound-color movies the railroads foster better and more profitable agriculture in their territories

agriculture to foster the development of that region is the wide distribution among eastern manufacturers and merchandisers of literature explaining the importance of irrigation to the whole nation. The same road recently operated a special train in northern and western Texas to help acquaint farmers with the profit possibilities of soil and water conservation, and a "machinery caravan" visited the important towns in the irrigated sections of Colorado, Wyoming and Nebraska to show farmers how new machines will save labor in crop production, particularly of sugar beets.

Building Up the Soil

The record of the Georgia & Florida in finding locations on its lines for new industries and in stimulating their development is illustrative of the contribution a railroad's development department makes to the improvement of the territory it serves. At the beginning of 1946 this relatively small road had some 275 carload-shipping enterprises on its rails. During that year 80 new carload shippers located on that line, an increase in one year of over 25 per cent in the number of such customers. The special significance of that development is its indication of a further change in the character of the road's territory from that largely concerned with producing and shipping raw materials to one engaged not only in such production but also in their processing and finishing.

Another contribution of this road's development department to the industrial progress of Georgia has been its active encouragement of local trade organizations or chambers of commerce in the communities on its line and its advocacy of the organization of a state chamber of commerce.

One phase of the agricultural development work of the Louisville & Nashville has been concentration on the greater production of chemurgic crops for which the producer can depend on a nearby commercial or industrial outlet. Included among them are tung and soys for feed or oil, ramie for fiber, and tree crops for pulp and cellulose. To accelerate the restoration of soil fertility in areas where it was depleted during the war or the preceding depression, the L. & N. has sponsored the increased use of lime and fertilizers and soil-building crops, working toward a greater reliance in its territory on livestock, perishables and general farm crops.

The agricultural development staff of the Union Pacific has been particularly active in the dissemination of literature designed to acquaint growers and producers in its territory with new practices and improved techniques. Examples of such publications are the road's "Farmseeker's Guide" and a series of booklets on the handling and marketing of potatoes. Supplementing this medium, the Union Pacific is undertaking a series of agricultural motion pictures which will, it is expected, not only instruct growers in new practices but also aid consumers in becoming informed about crop production and distribution, and present the problems of the grower to the wholesaler, broker and retailer. Two motion pictures in this series are "Along the Milky Way" and "Potatoes Unlimited." The former gives a colorful description of the dairy industry's production, processing, manufacturing and delivery techniques; the latter—with Bob Burns as narrator, pitting his "easy-does-it" methods of potato growing against the modern production techniques employed by alert growers in the road's territory—is packed with practical ideas on how and

where and why potatoes are produced and marketed.

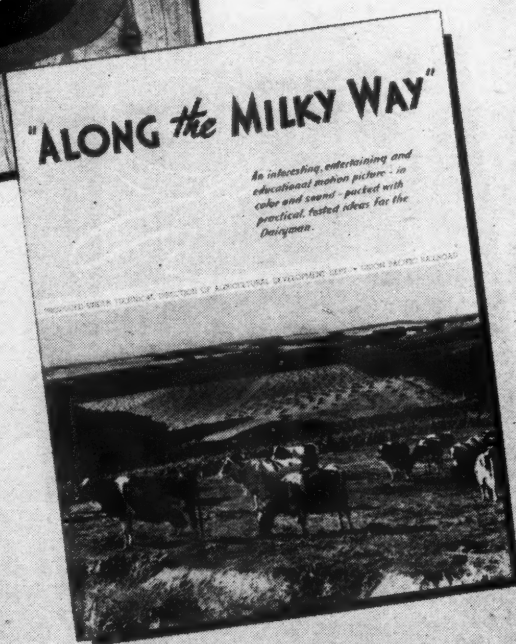
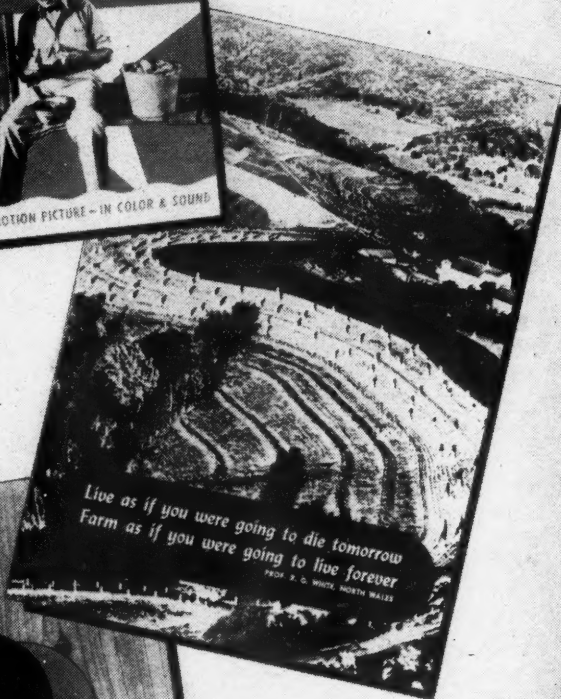
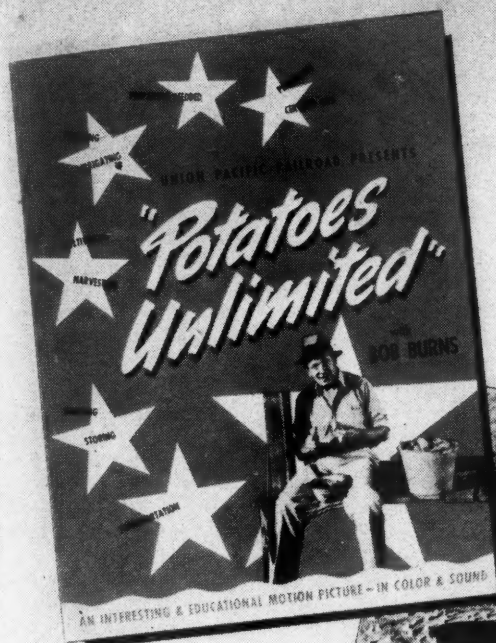
The B. & O. is another railroad that has been active in the creation and distribution of literature promoting better methods on the farm, carrying out its "better soils and better sires" program. Newest among these publications is "Balancing the Timber Budget in the Bumper Belt," in which the theme of forest conservation and tree farming is effectively developed.

In the Missouri Pacific's territory the development of carbohydrate feeds is being carefully engineered so as to use the southern sweet potato as a stock feed. Sweet potatoes carry high carbohydrates, sugar, carotene and many essential vitamin elements. This development is being carried on through demonstrations on the farm of small dehydrating units and in the distribution of dehydrated sweet potato feeds for dairy cattle and other livestock. The result of this work is to increase the interest of the farmers in the livestock industry and thus to increase the essential fertility of the soil.

Broadening Markets

The road's agricultural department carried on test work in sweet potato production which indicates that sweet potatoes can be grown successfully for stock feed, as well as for the commercial fresh market, in areas extending far north of the present established proven areas. A production of 300 bushels of sweet potatoes when dehydrated produces the equivalent of 100 bushels of corn. This means a tremendous increase in livestock production in areas where corn is not well suited.

The Missouri Pacific also has fostered and promoted the development of an improved Boysenberry, particularly suited for freezing. This has resulted in



the planting of hundreds of acres of a type of fruit that does not lend itself to refrigeration for transportation, and, therefore, has been marketed through local channels. The development of a freezing process opens up a nationwide market for this most profitable type of fruit growing.

The proper marketing of agricultural products depends to a large extent on the careful grading, packaging, handling and transportation of the product. Education in the best methods of handling fruit and vegetables is being carried to the producer and railroad agricultural development organizations are demonstrating the best methods of handling fruits and vegetables from field to consumer.

Bringing in Industries

The development of the Rio Grande valley in Texas has been based on the production of citrus fruits and vegetables. The processing of citrus fruit juices has been highly developed in the valley, and canned fruit juices are now reaching new markets. Railroad agricultural and industrial departments cooperate very closely in the establishment of new industries which depend upon agriculture for their raw materials and supplies, such as milk plants, dehydrated stock feed plants, soybean mills and alfalfa mills.

Such examples as these, taken at random from the reports of recent developments in service to shippers by railroad agricultural development organizations, at least indicate the variety and scope of the railroads' sales department activities. In the industrial development sphere activity is equally varied and productive. The Boston & Maine's industrial department expects 25,000 carloads of freight to develop annually from 150 new industries located in its territory. The Burlington has increased its industrial staff to aid in the establishment in suitable locations of industries that have discovered the advantages of decentralization. The Monon has set up a new real estate and industrial staff.

The Erie recently has very materially intensified the efforts of its industrial department. Information of interest to industries has been collected and disseminated to those checking plant locations. An advertising campaign in publications of national circulation has been continued and all inquiries are actively followed. Factual information and assistance are furnished to those checking plant locations.

Among the well-rounded shipper service departments of the railroads that of the Chicago, Milwaukee, St. Paul & Pacific has been particularly active since the end of the war. To accelerate the activities of that road's industrial de-

partment, a program of advertising in national magazines and newspapers was adopted for the purpose of informing prospective industries about the service which it is in a position to render. An attractive pamphlet, entitled "How to Find a Home for Your Business" has been prepared setting forth in considerable detail information about the territory served by the Milwaukee, and how the industrial development department can assist prospective industries.

Promoting New Markets

During 1946 the agricultural development department gave special attention to the execution of programs designed to increase the production and quality of major and special crops by: Securing effective distribution of seeds of new and improved varieties; obtaining wider and better uses of commercial fertilizers; getting more farmers to organize soil conservation districts and follow their recommended practices; renovation and improvement of permanent pastures and range; stimulating and promoting new markets for use of several crops; and cooperating with federal, state and local educational, extension and other agencies. The road has endeavored to effectuate buyer-seller relationships between corn belt and range area dealers in feeder livestock; advocated and furthered orderly sound development of reclamation and multiple-purpose water utilization projects in the Columbia and Missouri river basins as well as in other Pacific Coast and Midwestern areas; and aided in securing surveys of standing timber in the mountains which have resulted in sales to operators who will soon produce substantial tonnages of poles, pulpwood, ties and lumber.

The Milwaukee's geologists located and surveyed large deposits of high grade bentonite and investigated and reported on many and varied mineral deposits, some of which hold promise for commercial development and use. They aided in investigating the extent and kind of mineral occurrences, surveying coal deposits and investigating reports of mineral prospects. They supplied Army and Bureau of Reclamation engineers with information as to construction materials for building dams and other irrigation, flood control and power structures proposed for development of the Missouri, Columbia and other river basins. They have continued the compilation of all known mineral deposits in the road's territory and are working closely with federal and state geologists and mining agencies as well as with private organizations in their efforts to secure such information.

The agricultural department of the Illinois Central has organized and ex-

panded during the past two years the artificial insemination associations in Kentucky, Tennessee, Louisiana, and Mississippi. As a result the department has 11 pure-bred sires which have sired during the past year over 4,000 calves. The department has conducted a number of forestry short course schools among high school agricultural students, G. I. students and farmers who own tracts of timberland. These short courses, six hours of classroom instruction combined with one-half day in the woods, are planned to give these students a better appreciation of trees and a better knowledge of management enabling them to handle these trees. Illinois Central agricultural agents carry with them at all times soil testing kits, and continually through this soil testing work are training the farmers in rebuilding and better management of their soil so that they may improve their pastures for livestock and increase their soil fertility, enabling them to produce more cotton, oats, corn and other crops per acre.

During the year 1946 more new permanent industries were located along the Pennsylvania than during any other previous year on record. Despite the scarcity of building materials a great many industries, both large and small, purchased sites on which they propose to erect new plants as soon as material and building costs are on a more favorable basis.

Nationwide Progress

Among other reports of railroad efforts to develop agricultural and industrial expansion, selected at random, are the following:

In the Lake Okeechobee area of Florida, served by the Florida East Coast, considerable progress has been made in the development of ramie, and two decorticating plants have been built there. The Kansas City Southern gave an educational trip to the American Royal exhibition in Kansas City to more than 200 youths from its territory. The New York Central last year located a record number of 546 new industries on its lines; it renewed its 4-H Club tours. The Denver & Rio Grande Western conducted refrigeration tests of peaches and green-wrapped tomatoes to determine the most effective and economical methods of shipment. The Missouri-Kansas-Texas has been particularly active in securing the location on its lines of warehouses and distribution industries; in that road's southern territory specialty crops and maize and sorghums are replacing the usual corn and cotton acreage. The Lackawanna found the demand of industries for buildings in its territory exceeded the available supply, under current restrictions. The Pennsylvania has continued to distribute in-

formation relative to the growth and preparation of livestock, frozen foods, poultry, chemurgic crops, and dairy products. More industries were located on the St. Louis Southwestern in 1946 than in any previous year. Crop diversification and livestock raising were encouraged on the St. Louis-San Francisco.

The G. N.'s Rescue Wheat

The Lehigh Valley is actively assisting in the expansion of manufacturing operations. The Norfolk Southern is cooperating in the campaign of the state of North Carolina to develop rural industries. The industrial department of the Atchison, Topeka & Santa Fe has been active in encouraging the westward trend of industry, and the road is acquiring and developing new properties for industrial uses. The Seaboard Air Line has continued its long-range forestry program, directed toward improved forestry practices to assure wood-using industries a continuing supply of raw materials. The Great Northern has encouraged experimentation with sunflowers in North Dakota, as they yield what is considered, after olive oil, the best edible oil. Work is being pushed on the growth of mustard seed in Montana and on the introduction in that state of Rescue wheat, a type valuable where infestation with wheat stem saw-fly has been spreading. The seed crop was enlarged from the single bushel started in Arizona in the winter of 1944-45 to 4,747 bushels available for seeding in Montana in the spring of 1946. This is regarded as a major contribution to the eradication of a pest that destroyed five million bushels of wheat in that state in 1945.



Photo courtesy Canadian National

A. A. Gardiner (right), general passenger traffic manager, Canadian National, bidding farewell recently to Bing Crosby as the latter left Montreal for Boston, Mass., after a brief vacation.

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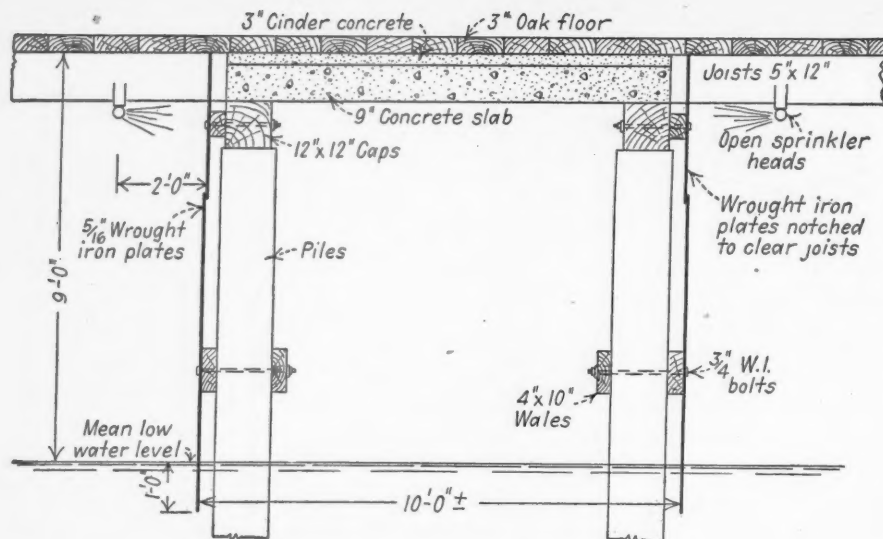
Wrought Iron Used Effectively in Marine-Pier Fire Walls

Fireproof cells, topped with concrete, were built at intervals of about 300 ft. by surrounding adjacent pile bents with a protective curtain extending from the floor to a foot below mean low water

NORFOLK & Western engineers, warned by below-deck fires which, early in 1945, destroyed two waterfront piers that belonged to their neighbors at Hampton Roads, Va.; and fortified by the knowledge of the resistance of wrought iron to salt-water corrosion and fire, have used this material liberally to replace deteriorated concrete fire stops under the decks of two piers at Lambert Point, Va. One of these piers is 1,195 ft. long, 207 ft. wide, and has an 18-ft. apron on each side. It is served by two depressed tracks extend-



Above—The Norfolk & Western piers at Lambert Point, Va., which have been protected against the spread of fire below deck by wrought iron fire walls. Below—The fire curtain completely surrounds two rows of piles, making an impregnable 10-ft. barrier across the pier



Vertical cross section of the fire stop showing curtain side walls and cooling sprinkler heads

ing through the center of the shed, and by one track on the south apron. The other pier is 1,200 ft. long, 207 ft. wide, and has a 7-ft. apron on both sides. Four depressed tracks traverse the center of its shed.

Built in 1916 on timber piling, both piers have 3-in. oak floors over 5-in. by 12-in. joists supported by 12-in. by 12-in. caps. It was recognized at that time that such construction was vulnerable to fire below deck, and concrete fire walls were installed. However, severe tidal action, corrosive industrial acids, and salt water had rendered several of these walls so useless that replacement became necessary.

Curtain Construction

To combat the ravaging effects of corrosion and to minimize the hazard of fire, four new fire-stop cells have been built beneath each pier, with Byers wrought iron plates forming the sides and ends, and concrete the tops. Each of these cells was built to surround and isolate two adjacent pile bents the full width of the pier. The concrete top consists of a 3-in. layer of cinder concrete laid on top of a 9-in. concrete slab, supported by the caps. With the depth of the two layers of concrete equal to the depth of the joists, the oak flooring could be laid on top.

The sides of each cell were constructed of 5/16-in. plates, fabricated together so as to make a fire curtain 10 ft. deep, extending from the underside of the floor to one foot below mean low-water level. Each fabricated plate was notched at the top to fit between the joists and against the flooring, and at other places where cross bracing intersected it. These notches were cut so as to maintain a maximum clearance of 1/4 in. between the wood and metal. The entire curtain was fastened near

the top to the caps and slightly below center to the piles by 3/4-in. wrought iron bolts. Spacing wales, 4 in. thick, through which the bolts pass, were used to separate the plates from the caps and piles. The two fire curtains forming each cell were closed at the sides of the piers, about 8 ft. in from the edge of the aprons, by additional

wrought iron plates to seal the cell completely and surround the two rows of piles.

Sprinkler System

Open sprinkler heads were spaced five feet apart, two feet away from the wrought iron plates, and, when manually operated, provide a spray of water against the plates to prevent heat transfer through them to the supporting timbers. These sprinklers are on 4-in. water lines supplied by a 10-in. overhead main running through the pier shed.

A 100,000-gal. elevated tank is used to supply water for the fire protection system. As further protection, the end of each four-inch line is fitted with a connection by means of which fire boat pumps can supplement the tank pressure.

The A. M. Byers Company, Pittsburgh, Pa., supplied approximately 175 tons of wrought iron plates for the fire walls, which were designed under the direction of W. P. Wiltsee, chief engineer of the Norfolk & Western. The installation was made by John P. Pettyjohn & Co., Lynchburg, Va., under the supervision of J. Y. Neal, assistant engineer of the N. & W.

Fire-Retardant Coating

The Albi Chemical Corporation, New York, has developed a new fire-retardant coating material, known as Albi—"R", which is said to be highly effective in reducing fire hazards.

Shipped in powder form to be mixed with water, Albi—"R" is applied like a paint and is said to dry to a white, smooth, hard, flat surface which will not dust or peel. If desired, it can be tinted by the addition of dry colors or water-soluble dyes.

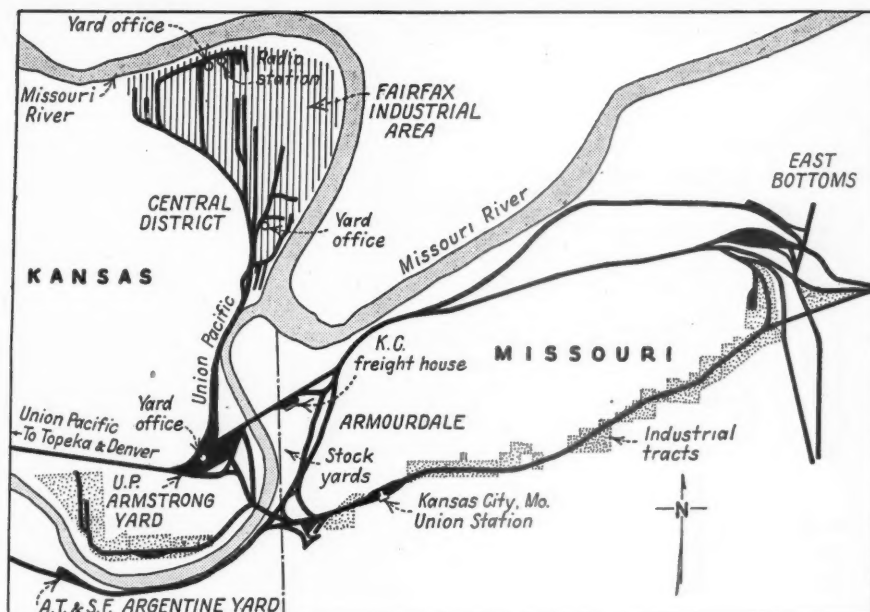
This product is intended for use on all interior combustible surfaces and is reported as having excellent qualities of adherence regardless of whether the surface is painted or unpainted. Further, it is claimed, it can be used as an undercoat for oil paints, enamel or lacquer, a practice that is recommended for locations where excessive moisture prevails or where washing is necessary. As an interior finish, Albi—"R" is reported to be as resistant to interior exposures as cold-water paint. In accelerated interior exposure tests, conducted at Purdue University, equal to

approximately 12 years of normal exposure, Albi—"R" was said to be unaffected in appearance, bonding or fire-retardant qualities.

When surfaces coated with this material are exposed to flames, small blisters form at the point of greatest heat, gradually spreading as the temperature increases. This formation is said to develop into a cellular mat, the thickness of which increases in proportion to the intensity of heat and the thickness of the original coating of Albi—"R". The effect of the blisters is to place a blanket of incombustible material between the flame and the surface underneath the coating.

In "20-min. burning" tests of Federal Specification SS-A-118 on interior plywood and several types of fiber insulation board, coverages of 140 to 200 sq. ft. per gal. were said to meet the requirements of the "slow-burning" classification. Thoroughly tested by Underwriters Laboratories, Inc., Albi—"R" was found to be effective in reducing the flame spread on woods between 50 and 70 per cent as compared to uncoated lumber, without adding to the toxicity of such gases as are released by untreated wood when exposed to fire.

Improved service to shippers and better utilization of locomotives have resulted from installation of two-way radio equipment in 3 yard offices and 16 switch engines in Kansas City



Locations of yards, industrial areas, freighthouses and interchange points in the Kansas City area

Yard Radio on the Union Pacific

AS a part of a program to utilize modern facilities to improve service to shippers, the Union Pacific has installed two-way radio equipment for communication between three yard offices and 16 Diesel-electric switch engines used in the Kansas City (Mo.-Kan.) yards and switching area, which is roughly about 10 mi. in diameter. Kansas City is the eastern terminal of the Union Pacific line to Denver, with direct connections through Omaha, Neb., Gibbon, Neb., and Cheyenne, Wyo., with the Union Pacific "Overland route" between Omaha and cities on the West coast.

Every 24 hr. the Union Pacific brings about 1,000 to 1,200 freight cars into Kansas City from the west, about 900 of which are delivered to connecting railroads for movement east and south, and the remainder to industries in the Kansas City area. Similarly, every 24 hr. the Union Pacific receives about 950 cars from connecting railroads in the Kansas City district, and picks up 200 to 300 cars from industries. The principal freight yard of the Union Pacific in this area, known as Armstrong yard, is located in Kansas City, Kan., just west of the Kansas river. This layout is more than 1.5 mi. long and includes receiving tracks, departure tracks and two flat classification yards, one for breaking up inbound trains and the other for making up outbound westward trains. The layout includes ice

docks and various other conventional terminal facilities.

The principal U. P. freighthouse in the area is in Kansas City, Mo., just east of the state line. The Union Stock Yards and large packing houses are south of the freighthouse. In addition, this railroad serves numerous industries on its tracks. For example, the Union Pacific exclusively serves the new Central Manufacturing District and the Fairfax industrial area of approximately eight square miles located in Kansas just west and south of the Missouri river, as shown on the map. Every working day, about 150 cars are delivered to and the same number are picked up from industries in these areas.

In addition to serving industries, the Union Pacific delivers cars from Armstrong yard to the yards of various connecting lines; to the Frisco, the Rock Island and the Katy at Armourdale; to the Santa Fe at Argentine; and to the Missouri Pacific, the Kansas City Southern and the Milwaukee at East Bottoms. Most of these deliveries are made over tracks of the Kansas City Terminal. The points of delivery of cars range up to seven miles air-line distance from the principal yard office at Armstrong yard.

The yard switching, as well as all the pickup and delivery service performed by the Union Pacific in the Kansas City area, is handled by 16 Diesel-electric locomotives which, as a general rule,

are in service 24 hr. every day. Ordinarily each crew consists of an engineer, a fireman, a conductor and two helpers.

About 16 such crews are in service on each of the three tricks daily. The locomotives are used interchangeably on any assignment. The crews can be assigned to any type of yard work, but ordinarily certain crews work in Armstrong yard. Others are assigned to the Fairfax runs or to deliver cars to connecting lines.

The principal yard office is at Armstrong yard, where a yardmaster is on duty each trick. He has a radio for communication with any of the 16 locomotives. The second yardmaster's office is at Fairfax road and Quindaro avenue in the Central district, which is the south portion of the Fairfax area. He is on duty at this office continuously. His radio is used primarily for communicating with locomotives switching in the Central district.

At the far north end of the Fairfax area, just south of the Missouri river and east of 77th Street trafficway, the Union Pacific has a new yard, known as Fairfax yard, which is used as a center of operations for distributing cars to and assembling cars from industries preparatory to moving them in long cuts direct to Armstrong yard. At the office in Fairfax yard, a yardmaster is on duty from 11.00 p. m. to 7 a. m., and his radio is used primarily

for conversation with crews on locomotives working in the Fairfax area.

The fixed radio station and aerial which transmit the calls from the three offices to the locomotives, as well as receive the calls from the locomotives, are located near the Fairfax yard office. This radio equipment is connected by a land-line wire circuit to the three yard offices. The system operates like a party line, the radio equipment at the fixed station and on all the locomotives being tuned to 161.85 megacycles so that the loud-speakers in the three offices and in all the locomotives ordinarily reproduce the calls and conversations between all parties. The excep-

transmitter, as for example, "This is engine 1135 answering Armstrong yard office. What do you want?" He then releases his push-to-talk switch and listens for the reply. The yardmaster may then issue instructions such as, "Go to Owens-Corning and pick up U. P. car 496198 and take it to Fairfax yard." The man on the engine replies, "Engine 1135, I understand. Signing off."

When deliveries of cuts of cars are made to other railroads, the yardmaster at Armstrong can keep in touch with the crews so that he is informed of their progress and will know when they will return. For example, if the crew mak-

ing a delivery to East Bottoms is being held for a long time at a crossing with the Missouri Pacific, the crew can use the radio to let the yardmaster know where they are, and he in turn can use his regular telephone to call the yardmaster or superintendent on the Missouri Pacific to inquire concerning the necessity for the delay. In the principal yard at Armstrong, the yardmaster uses the radio to keep in touch with locomotives switching cars to make up trains. Every few minutes some circumstance arises in which a conversation over the radio saves time for a car.

Prior to the installation of the radio, the only way for the yardmasters to reach crews of switch engines was to walk through the yards hunting for them. By means of the radio, the yardmaster can keep in touch with all the crews to know the progress of their work and to give instructions concerning changes in routine to meet new circumstances. For example, in the classification yard, if the track for cars destined to Denver is filled, the yardmaster can set up another track at once, without delaying the entire operation. If the yardmaster receives a last-minute diversion order to change the destination for a car, he uses the radio to direct a crew to switch the car. Thus several hours or perhaps a day may be saved in placing the car at its final destination.

Prior to the installation of the radio, the only way that a switch crew could communicate with the yardmaster's



Above—The yardmaster at Armstrong yard office uses his radio to contact switch engines in a large area. Right—Fireman in cab of a Diesel-electric switcher talking to the yardmaster on his set

tion is that the yardmasters in the three offices can use their sets and the land-line wires as an intercommunicating telephone system to talk with each other without the messages being sent out by radio and, therefore, being received on the locomotives.

If a yardmaster wants to call a certain switch engine, he presses his push-to-talk button, and speaks into his microphone, as for example, "Armstrong yard office calling engine 1135." He then releases his push-to-talk button and the reply comes in on his loud-speaker. When the yardmaster's call is heard in the loud-speaker on locomotive 1135, the conductor, if present, or the fireman, takes his handset from its hanger, presses the push-to-talk button on the hand piece, and speaks into the





The radio communication operates satisfactorily when switchers are making deliveries to other railroads at points more than seven miles from the Union Pacific yard office

office was by means of telephones in offices and booths at various locations in the yards and along the routes used when making deliveries. One complaint about this arrangement was that a lot of time was lost hunting for a telephone, and that the telephone lines or the yardmaster's phone were usually busy, so that the call could not be completed promptly. Considered from another viewpoint, no matter how many phones were available in wayside booths and offices, there was no means for the yardmaster to call a crew conductor to a phone. Therefore, prior to the use of the radio, the yardmaster spent considerable time walking through the yard to locate crews in order to give them instructions. When crews were working in the more extensive Fairfax area or were making interchange deliveries to other roads at Argentine or East Bottoms, the yardmaster in some instances used his automobile to locate the crews.

Thus the important advantage of the radio is that it provides direct calling and prompt answers. According to J. A. Langan, terminal trainmaster in charge of yard operations in the entire Kansas City area, the radio is facilitating operations because difficult circumstances are being corrected promptly as they arise, rather than allowing serious delays to develop. Thus the radio is an aid in giving better service to ship-

pers, and in utilizing the switch engines and yard facilities to a better advantage. Inbound trains are classified in a more orderly manner, and deliveries are made promptly to consignees and to connecting lines. Cars for outbound trains are classified and blocked more completely than before, and, furthermore, trains are ready to go on schedule with cars that in some instances could not have been included except with the use of radio.

The Radio Equipment

All of the radio equipment on the 16 switch engines and at the fixed station near the Fairfax yard office operates at 161.85 megacycles. The call letters for the fixed station are KRUP (Kansas Radio Union Pacific). The aerial is mounted on top of a steel floodlight tower 100 ft. high. This fixed-station transmitting and receiving equipment is operated in connection with any one of the three offices. The principal control office is at Armstrong. Regulations of the Federal Communications Commission require that the equipment at the principal control office must include an indicator to show that the station is "on the air." Accordingly, there is a lamp indicator on the panel at Armstrong that is controlled by a radio receiving set at Armstrong office. Thus

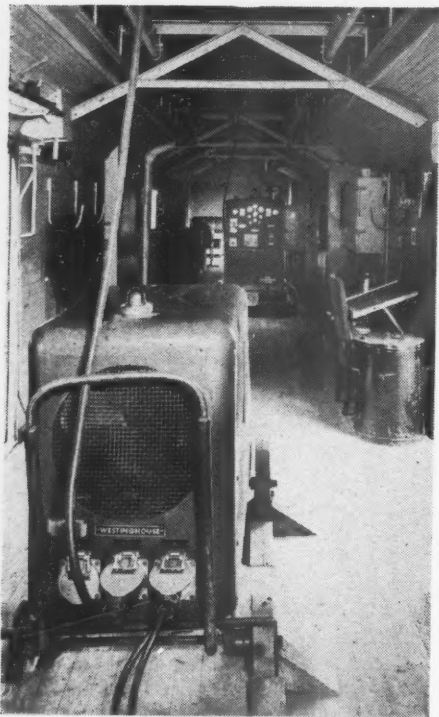
when the yardmaster at this office speaks into his microphone, the lamp indicates that his message is going out by radio from the aerial at the fixed station at Fairfax.

On the Switch Engines

On each of the Diesel-electric switch engines the radio sending and receiving sets are enclosed in a sheet-metal case mounted inside the cab toward the rear. These units are sealed, and if one fails to operate properly, it is replaced, the defective unit being sent to the shop at Omaha for inspection and repair. The units are plug coupled, so they can be replaced without changing wire connections. The radio receiving and sending equipment operates on alternating current supplied from a rotary converter driven from the starter batteries on the locomotive. The aerial on each locomotive is a quarter-wave vertical radiator 18 in. long, mounted on top of the cab roof.

This communication system was planned and installed by Union Pacific forces under the jurisdiction of G. R. Van Eaton, superintendent of telegraph, and under the supervision of C. O. Jett, system telephone and telegraph engineer. The radio equipment was furnished by Motorola, Inc., Chicago.

New York Central Equips Car to Furnish Electric Power



Interior of the power car showing a rectifier in the foreground and the control end of the power plant in the rear

TO meet the many incidental needs for electric power which frequently occur where there is no convenient local source, the New York Central has equipped a 60-ft. steel baggage car with an electric power plant. The car has been used with two agricultural exhibit trains which were operated in two instances for one-month periods. In one case, an exhibit was shown in New York state under the auspices of the New York Central and Cornell University, and more recently, another was conducted by the railroad and the agricultural department of Purdue University. The car has also been used to supply power for taking motion pictures on a New York Central passenger train. The pictures were color movies used for advertising purposes and the power plant offered special advantages, since the voltage could be controlled to produce exactly the right color temperature

To meet situations where local electric service is inadequate, a steel baggage car equipped with Diesel engine and generator provides flexible power source

of the lights. The car may also be used for serving parked Pullman cars for battery charging or emergency lighting, or the operation of motors such as might be required for turntable service.

The car is a 60-ft. steel automobile baggage car with end doors which facilitate the loading of portable rectifiers, when needed. Power is generated by a 60-hp. Diesel engine driving a 30-kw., 3-phase, 60-cycle, 220-volt, Y-connected generator. The voltage across terminals is 220, and the neutral is brought out so that 115 volts may be obtained between an outside terminal and the neutral. In this case, the excitation is reduced to lower the single-phase voltage from 127 to 115.

Power Plant Controls

When d.c. power is required a portable rectifier is borrowed from the nearest yard and carried in the car. These rectifiers use 220-volt, 3-phase, a.c. to produce 40 or 80 volts d.c. for battery charging or for supplying d.c. standby requirements of cars not equipped with Genemotors or a.c.-d.c. compressor motors.

The power plant controls include a voltmeter and an ammeter, each reading for any phase, a field rheostat, field switch, line breaker, frequency meter, starter button, water temperature and oil pressure gages and a time totalizer. The maintenance and lubrication schedule for the engine is based on total hours operated and the totalizer is used to determine overhaul and lubrication times. The car is usually operated by two electricians.



Side door of the power car showing the location of the engine generator set

Power is carried from the car to other cars or points where it is needed by portable cables. From the generator terminals connections are made to two standard, 3-phase standby receptacles on each end of the car. Inside the car is a fifth standby receptacle with the neutral connected. This is used to provide 115 volts for lighting requirements. Connections to cars and other load points are made by portable cables. These consist of car-length (85-ft.) 2/0, single-conductor cables, equipped with Anderson Eitherend connectors. These cables are used for 3-phase, single-phase, d.c. battery charging or a.c. lighting. Since they are single conductor, they can be used for any application and are easy to handle and stow in the car. Being of car length, it is convenient to make connections with cars coupled end to end. Hooks on the side walls of the car are used for hanging stored cables.

Auxiliary Equipment

Auxiliary equipment in the car includes lockers for clothes, brooms, tools, etc. There are also racks for fuel oil drums and containers for lubricating oil and anti-freeze liquid. A long steam hose with a tee connection is carried to allow connection with yard steam lines or a locomotive.

The car has its own axle generator and batteries with overhead lighting units in the car. There are two sets of lights, one 30-volt d.c. and one 120-volt a.c. The engine has its own starting battery which is charged from the generator exciter.

GENERAL NEWS

"Olympian Hiawatha" Goes into Service

New transcontinental streamliner cuts 14 hr. from previous schedules

The new "Olympian Hiawatha," which was placed in regular service between Chicago and the Northwest June 29, made its initial "shakedown" run June 26 with members of the press as guests of the Chicago, Milwaukee, St. Paul & Pacific for the trip.

The new trains, of which there are six, include a mail-baggage-express car, coaches, "Tip Top" grill car, dining car and "Touralux" sleepers, all designed and constructed in the company's shops at Milwaukee, Wis. They also include first-class sleeping cars and an observation car, which, for the present, are of the conventional type. These will be replaced with the latest type of equipment later this year when delivery from the Pullman-Standard Car Manufacturing Company is effected. The new trains cut 14 hr. from the running time of the former "Olympian," which has been renamed the "Columbian" and which is now running on approximately the same schedule as the earlier "Olympian." The "Olympian Hiawathas" will be powered by Electro-Motive 4,000-hp. two-unit Diesel locomotives over the relatively level route between Chicago and Minneapolis, Minn., where Fairbanks-Morse 6,000-hp., three-unit Diesel locomotives will take over for the balance of the journey to Tacoma, Wash.—straight through the electrified sections in the Rockies.

Perhaps the greatest innovation in the new trains is the "Touralux" equipment, the first newly-constructed sleeping cars to be assigned to the intermediate class of travel. These cars include 14 sections, each slightly wider and longer than the customary section, with more headroom in the lowers. Spacious lounges are provided at both ends of the cars, with seats for smokers partially separated by partitions from the washing facilities at the men's end.

Each coach has 52 reclining-back seats, a ladies' lounge with four seats, and a men's smoking lounge with ten seats. Each lounge affords ample facilities for dressing.

The diner and "Tip Top" grill cars feature unusual seating arrangements designed for both utility and comfort. Some seats are arranged facing broad windows, offering an exceptionally good view for those who wish to observe the scenery along the route.

D. & R. G. W. Officers and Directors Buy Stock

Almost without exception, every director of the reorganized Denver & Rio Grande Western and some of its executive and other officers have become owners of both common and preferred stock in the new company. The management has encouraged this interest on the part of officers and directors, in the opinion that the action would prove to be "a reassuring factor to all other owners" of the company's securities.

SKF Announces \$4 Million Expansion Program

A two-year modernization and expansion program costing over \$4,000,000 has been announced by SKF Industries, Inc. The company's two Philadelphia, Pa., plants will be equipped with new machinery capable in some instances of operating two to six times faster than the standard equipment heretofore used, the announcement said. The bulk of the expenditures will go for this new machinery as the program is aimed primarily at increasing the production of spherical roller bearings.

College Course in Transportation Public Relations

The field of transportation public relations is covered by a new program established jointly by the departments of transportation and journalism in the University of Tennessee School of Business Administration. The program is designed to train students for advertising and editorial work, public speaking, personnel work and other public relations duties in the transportation field. Students will receive a broad course of study but will intensify their work in transportation and journalism during the junior and senior years. Professor William Way, Jr., of the department of transportation, will serve as adviser to students in the new program.

Monon to Publish Magazine

A bi-monthly employees' magazine will be published by the Chicago, Indianapolis & Louisville, with the first issue to appear on July 25. J. W. Barriger, president of the Monon, announced last week. The name of the magazine will be selected in a contest and will be announced on July 10. Prizes will be awarded for the best names submitted.

Railroads Will Seek Higher Freight Rates

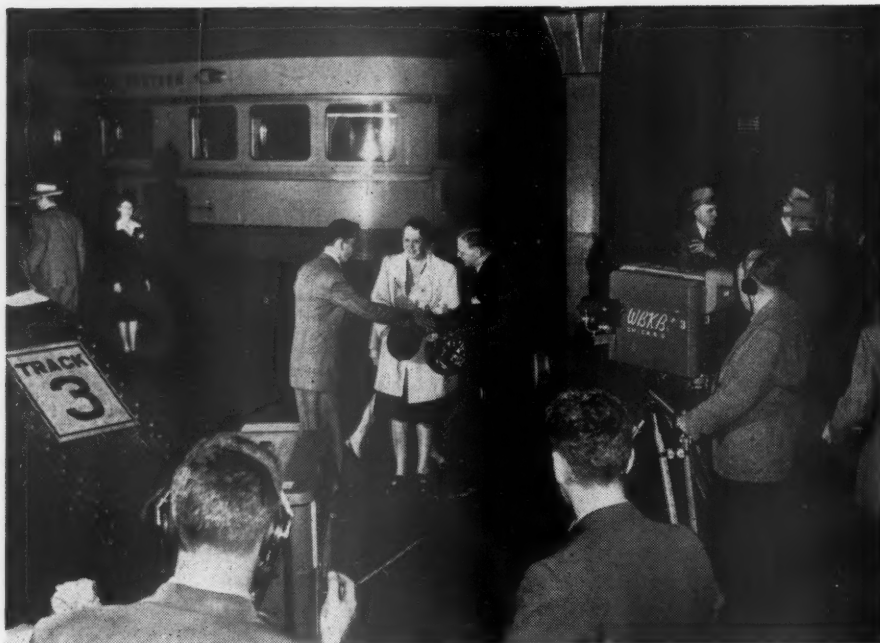
To ask increase of 25 per cent in East and 15 per cent in South and West

The railroads were preparing this week to file with the Interstate Commerce Commission a petition for authority to make general freight-rate increases of 25 per cent within Official Classification territory and interterritorially between that territory and other territories, and of 15 per cent within Southern and Western territories and interterritorially between those territories. A committee of railroad attorneys and traffic officers were in Washington, D. C., this week to prepare the petition which will be filed as soon as possible, perhaps early next week.

The general percentage proposals would be subject to various exceptions where maximum increases per 100 lb. or per ton would be specified. While no official estimates were available as to the additional revenue involved, figures between \$900 million and \$1 billion were heard. Notice of the plan to file the petition was sent by the railroads' territorial traffic associations to the National Industrial Traffic League. "It should be understood," that notice said, "that these proposed increases are based on estimates of the carriers' present day needs and do not anticipate increases in the costs of materials and supplies or wage adjustments that may occur in the future."

Coal and Iron Ore—The notice to the N. I. T. League further revealed the proposed exceptions to the general increases. Among them are bituminous coal where the increase would be 15 cents per net ton, except that a 25-cents-per-ton increase would apply to tidewater coal for transshipment by vessel to foreign countries other than Canada and Mexico and foreign bunker coal. The increase on anthracite coal would be 10 cents per net ton where the present rate is 75 cents per ton or less; 20 cents per net ton where present rates are from 76 cents to and including \$1.50 per ton; and 30 cents per net ton on rates over \$1.50 per ton. The increase on iron ore would be 15 cents per ton, net or gross as rated, applied to all rates. The increases on coke would be the same as those on anthracite coal, while lignite coal and lignite coal briquettes would take 15 cents per net ton.

Other exceptions where the general percentage increases will be limited by specified maxima include: Cotton in bales, maximum 7 cents per 100 lb.; fresh fruits and fresh or green vegetables, maximum 13 cents per 100 lb.; sand, maximum 40 cents



Television Broadcast at Chicago's North Western Station

A telecast, "Streamliner Time," was presented from the Chicago & North Western station in Chicago on June 17, featuring interviews with travelers boarding the "City of Los Angeles" and the "City of San Francisco." Success of the program led television officers to announce future programs televising scenes aboard trains.

* * *

per ton but not less than 20 cents per ton; petroleum and petroleum products, pitch and tar in tank cars, maximum 6 cents per 100 lb.; salt, maximum 2 cents per 100 lb.; logs, native wood, Canadian wood or Mexican pine, pulpwood and fuel wood, maximum 8 cents per 100 lb.; lumber and articles taking the same rates, posts, poles and piling, ties, and woodpulp, maximum 12 cents per 100 lb.; iron and steel articles, maximum 7 cents per 100 lb. but not in excess of \$1.40 per ton, net or gross as rated; cement, lime and plaster, maximum 6 cents per 100 lb.; sugar, maximum 12 cents per 100 lb.

Higher Handling Charges—The general 25 and 15 per cent increases would be applied to rates on milk and cream in passenger or freight services, while 25 per cent increases in all territories would be applied to charges for protective services, c.o.d. services, diversion or reconsignment, and stopping in transit to partly unload or complete loading. Increases in switching charges would vary from 10 to 25 per cent, while the handling charges on iron ore at lower lake ports would go up 10 per cent. The minimum rate for pickup and delivery services would be increased to 65 cents per 100 lb., but there would be no increase in allowances made by carriers for drayage or other services performed by shippers.

Charges for loading or unloading as provided in Section 2 of Classification Rule 15 would be increased to 6½ cents per 100 lb., but there would be no increase in charges for the loading and unloading of livestock, nor in wharfage, handling and tipping charges applicable at South Atlantic and Gulf of Mexico ports. All-commodity rates would take the general percentage increases as would freight in truck bodies or trailers on flat cars. No increase in demurrage charges will be proposed.

Declines in Turn-Around Time, Detention Noted by Kendall

The average turn-around time decreased to 13.40 days in May, the lowest since October, 1946, and the average detention of freight cars over the free time declined to 15.68 per cent, the lowest since July, 1945, it is reported in the latest monthly review of the "National Transportation Situation" by Warren C. Kendall, chairman of the Car Service Division of the Association of American Railroads.

"Shipper requirements for all types of equipment continue heavy, it accordingly being imperative there be a continuance of efficiency by carriers and the shipping-receiving public, with as much emphasis as possible by all in the observance of the car service rules," Mr. Kendall said. He noted that the percentage of home box cars on home lines has increased from 16.4 per cent on March 1 to 20.5 per cent on June 1. "It is important from the standpoint of shippers that cars be relocated to owners for up-grading," he said.

According to Mr. Kendall, loadings of revenue freight for the week ended June 7 were the highest for the first week of June since 1930, when Class I roads had 535,000 more cars than at present. With respect to box cars, he reported that "heavy demand" continues for the better grade cars with "some temporary relief" in the requirements for cars of the rough freight type. He said that the latter are being repaired as they reach home roads so as to "up-grade" them to the extent practicable.

"It is apparent the demand for box cars will continue exceedingly heavy, not only to take care of the record wheat production, but also for the handling of other commodities requiring this type car," the

C. S. D. chairman said. "Every effort has been made to start the harvest season off with the best possible car supply and at the start of cutting wheat in the Southwest, approximately 16,000 empty cars were continued in storage position to load this commodity in order to protect this heavy crop in the short space of time in which it is necessary to handle. It will be necessary to continue to assist the heavy grain loading roads with empty box cars in order to satisfactorily handle the harvest. Orders issued by the Car Service Division to eastern and southern roads call for the delivery of 1,165 empty box cars daily to western roads and deliveries on these orders at the present time are averaging 1,250 daily."

The review further points out that open top cars recently have supplanted box cars as the "No. 1 problem," with reported shortages averaging 10,000 cars daily. "During this period of record demands, every gondola and hopper car has a job to do and the railroads bespeak the continued cooperation of shippers and receivers in saving car delays by prompt loading and unloading," Mr. Kendall continued. "Frequently one or two hours expended at the close of a day in completing the unloading or loading of a car will eliminate a full day from the turn-around time. Shippers can also help materially by loading cars in accordance with car service rules to the fullest possible extent and thereby minimize car shortage by returning equipment to the owning roads."

Turning to other types of equipment, Mr. Kendall reported (1) a "tight" supply of flat cars, particularly in the Midwest; (2) increased demands for covered hoppers, particularly in the Pennsylvania cement-loading area; (3) a decrease in stock car loading, as compared to 1946, with surplus single-deck stock cars being used to load watermelons and other commodities which can be accommodated in that class of equipment; (4) a diversion to general service loading of specially equipped automobile cars, due to a recession in production; and (5) indications that loading of refrigerator cars will continue heavy for the balance of the year.

The C. S. D. chairman also reported that the movement of freight through domestic ports continues "heavy," the total handled during May being 36 per cent in excess of that for May, 1946. He added that as of June 6, the number of cars of export freight on hand at all ports totaled 14,707, with an average daily unloading of 3,174 cars for the week.

Death Benefit Increases Under 1946 Retirement Act

An analysis of the first 100 cases in which death benefits were awarded under the 1946 amendments to the Railroad Retirement Act (the so-called Crosser Law) shows that survivors of deceased employees are gaining "very substantial advantages" under the new law, according to the latest monthly review of the Railroad Retirement Board. Of the 100 families to whom benefits were awarded, 64 received immediate monthly benefits averaging \$44.31 per family and the remaining 36 received

the new-type lump-sum benefit at an average of \$345.82. For the 100 families as a group, the R. R. B. said that the average insurance value of the benefits is \$3,570 per family.

Under the old law, according to the review, lump-sum payments averaging \$791 would have been made in only 57 of the 100 cases. Noting that the average value of benefits for those 57 cases under the new law is \$4,165, it said that in the remaining 43 cases, in which nothing would have been paid under the old law, the average value of the benefits is \$2,780.

The review also indicates that awards of employee annuities in April rose to 3,749, the highest monthly figure since August, 1938, and more than double the monthly average for the January-March quarter. Total benefit payments for April amounted to \$15,856,000, more than 5 per cent above the March figure. The payments, the review observed, brought the total for the fiscal year to date to \$140,316,000, 11 per cent above the amount paid in the same 1946 period.

The death of 188 pensioners during April reduced the number of pensions in current-payment status to 13,872. Applications for certificate of benefit rights declined from 11,333 in March to 9,012 in April, a drop of 20 per cent. Claims receipts totaled 153,838, a decrease of approximately 16 per cent from the preceding month's figure. A total of \$4,289,000 was paid for unemployment in 148,065 two-week claim periods.

In its employment service operations, the Retirement Board reported 6,638 job placements, a rise of 2,280 over the preceding period, due principally to seasonal changes in maintenance-of-way activities. For the same reason, placement of claimants rose to 2,545, as compared with 1,708 in March and 657 in February.

Chicago Roads Seek Higher Commuter Fares

Six railroads providing suburban service at Chicago on June 30 filed with the Illinois Commerce Commission new rate schedules which will, on the average, increase commutation fares 20 per cent. The railroads involved are the Chicago & North Western; Illinois Central; Chicago, Burlington & Quincy; Chicago, Milwaukee, St. Paul & Pacific; Chicago, Rock Island & Pacific; and Chicago, Aurora & Elgin. The Chicago North Shore & Milwaukee had previously applied for flat increases on 12 and 60-ride tickets, on which petition the commission has scheduled hearings starting September 9.

All of the roads, which filed their applications separately, complained of soaring costs in contrast to commuter rates which had remained all but constant for some 20 years. Most of the roads requested that the increases be granted in order to reduce losses suffered from suburban operations. The Illinois Central published advertisements in the Chicago newspapers stating that its suburban service earned only slightly more than 1 per cent and was insufficient to provide new equipment and improved track and station facilities. The latter road announced an improvement pro-

gram of \$9,500,000, to include purchase of 50 new suburban cars, contingent upon approval of the new rate schedules.

Haskelite Expands Facilities

The Haskelite Manufacturing Corporation, Grand Rapids, Mich., the producer of Plymetl, has acquired a new plant for \$1,200,000 from the War Assets Corporation as an addition to its present facilities at Grand Rapids. The structure is an air-conditioned windowless building containing 230,000 sq. ft. of floor space.

Non-Ops' Wage Demands Go to Mediation Board July 8

Negotiations between the railroads and 17 non-operating unions concerning the brotherhoods' demand for a 20 cents an hour wage increase ended in Chicago on June 26, as both parties requested the National Mediation Board to intervene in the dispute. Wage talks had been in progress behind closed doors since June 18. Mediation proceedings are expected to begin in Chicago July 8.

As negotiations ended, Daniel P. Loomis, spokesman for the carrier representatives, said the railroads could not accede to a wage increase which would add \$568,000,000 annually to the public's transportation costs. "The railroads haven't got the money and have no assurance that they can get it," he declared. "Unlike other industries which can promptly adjust their prices to rising costs, the railroads have to go to the Interstate Commerce Commission for approval for rate increases. Present rate levels are inadequate to support the wage increases granted last year, along with the increased cost of materials, fuel and other supplies."

He pointed out that weekly earnings of non-operating employees during the first quarter of this year averaged 15½ per cent more than during the war year 1944, while the weekly earnings of factory workers during May of this year averaged only 6 per cent more than 1944. Wages today, he asserted, are nearly 53 per cent higher than in 1941. The unions contend that, despite these gains, railroad wage increases have not kept pace with those in other industries.

Floods Hit RRs at St. Louis; Service Improves Elsewhere

Train service in the vicinity of St. Louis, Mo., is the latest to be hampered by floods which have curtailed railroad operations in the Middle West during the past month. At the same time, carriers operating north of St. Louis, through Iowa, Illinois and Nebraska, were approaching normal operations, including nearly on-time schedules for trains between Chicago and the West Coast (see last week's *Railway Age*, page 1317).

In the St. Louis area, the Missouri-Kansas-Texas reported detouring trains between St. Louis and Boonville via the Missouri Pacific, due to water over its tracks. Because of inundated tracks at Chester, Ill., the Missouri Pacific has closed its Illinois division from Dupu to Gale and Illmo. The latter road reports

that all principal routes continue in operation despite high water.

The effect on other lines has been as follows:

St. Louis-San Francisco.—This road has discontinued passenger service between St. Louis and Memphis, Tenn., its sleeper being handled via the Illinois Central. Freight trains are being re-routed over its own lines via Springfield, Mo.

St. Louis Southwestern.—Because of high water north and south of Chester, this road detoured via East St. Louis to North Cairo, Ill., over the Illinois Central, thence via the Gulf, Mobile & Ohio to Tamm, Ill. Traffic from the latter point has been detoured over the Chicago & Eastern Illinois to Fayville, Ill., thence via the M. P. to Thebes.

Gulf, Mobile & Ohio.—This road reports its Kansas City (Mo.) line out at Glasgow, Mo., necessitating detours between St. Louis and Kansas City via the Wabash. Repairs will require several weeks to complete.

Chicago, Burlington & Quincy.—Service continues halted on the line between St. Louis and Burlington, Iowa. However, at other points, the road's service has greatly improved, or was expected to do so this week. It is operating over its own line between Chicago and Kansas City, and with the completion of bridge repairs expected this week at Red Oak, Iowa, its Chicago-Denver, Colo., line will be restored. Service via Cambridge, Neb., which also blocked traffic between Chicago and Denver, was restored last week.

All other railroads operating through the Mid-West reported improvements in their services, although slow orders still prevail in many instances.

Equipment on Order

Class I railroads and private car lines had 101,980 new freight cars on order on June 1, as compared with 99,896 on May 1, according to the Association of American Railroads. Of the former total, Class I roads and railroad-owned private-controlled refrigerator companies had 98,630 new freight cars on order, compared with 93,622 on May 1 and 39,483 on June 1, 1946.

Cars on order by Class I roads on June 1 included 34,247 hopper cars, of which 1,710 were covered hoppers; 6,613 gondolas, 1,093 flat, 9,326 refrigerator, 255 stock, 318 miscellaneous freight cars and 46,778 box cars, including 42,548 plain and 4,230 automobile box cars. Of the total number of new freight cars which Class I roads had on order June 1, 23,088 will be built in railroad shops and 75,542 in outside shops.

The Class I roads had 748 locomotives on order June 1, compared with 585 on the same day in 1946. The former total included 30 steam, six electric and 712 Diesel-electric locomotives, compared with 63 steam, six electric and 516 Diesel-electrics a year ago.

Class I roads installed 15,486 new freight cars in service in the first five months of 1947, of which 4,138 were installed in May. New freight cars put in service in the same 1946 period totaled 14,723. Those installed in the 1947 period

included: 4,225 hopper cars, of which 561 were covered hoppers; 1,592 gondolas, 825 refrigerator, 454 flat, 295 stock, 100 miscellaneous freight cars and 7,995 box cars, including 5,935 plain and 2,060 automobile box cars.

The Class I roads also put 346 new locomotives in service in the first five months of 1947, of which 57 were steam and 289 were Diesel-electric. New locomotives installed in the same period last year totaled 101, of which 39 were steam and 62 were Diesel-electric.

The Class I roads have retired 20,562 freight cars in 1947, of which number 5,215 were retired in May. As of June 1, 1946, 24,940 cars were retired.

Simplified Numbering on the Monon

In the interest of reduced figure-writing, the Monon is rearranging the numbering of its cars, locomotives and trains—with the objective of establishing a series of numbers which will employ the minimum digits necessary to distinguish these units. The management is motivated not only by the desire to reduce the figure units which will have to be transmitted in messages and recorded on reports but also by the belief that every unneeded figure enlarges the opportunity for error.

Shippers Boards Expect Higher Third Quarter Loadings

Freight car loadings in the third quarter of 1947 are expected to be 4.7 per cent above those in the same period in 1946, according to estimates by the 13 Shippers Advisory Boards.

On the basis of those estimates, loadings of the 32 principal commodity groups will be 8,652,845 cars in the third quarter of 1947, compared with 8,261,681 actual car loadings for the same commodity groups in the corresponding period last year. All of the 13 boards, except the Ohio Valley board, estimate an increase in carloadings for the third quarter of 1947 compared with the same period in 1946.

The tabulation shows actual carloadings for each district in the third quarter of 1946, the estimated loadings for the third quarter of 1947 and the percentage of increase:

Shippers Advisory Boards	Actual Loadings Third Quarter 1946	Estimated Loadings Third Quarter 1947	Per Cent Increase
New England . . .	110,401	119,392	8.1
Atlantic States . .	731,250	783,824	7.2
Allegheny	1,183,818	1,192,920	0.8
Ohio Valley	1,081,732	1,068,763	1.2 dec.
Southeast	854,396	923,231	8.1
Great Lakes	632,529	677,014	7.0
Central Western . .	308,957	324,402	5.0
Mid-West	993,409	1,028,247	3.5
Northwest	758,712	802,595	5.8
Trans - Missouri -			
Kansas	463,124	478,270	3.3
Southwest	518,401	545,150	5.2
Pacific Coast . . .	367,412	432,878	17.8
Pacific Northwest	257,540	276,159	7.2
Total	8,261,681	8,652,845	4.7

The 13 boards expect an increase in the third quarter compared with last year in the loading of 24 of the commodity groups listed, and a decrease in eight. Among those showing the increase are the following: Citrus fruits, 34.4 per cent; agricultural implements, and vehicles other

than automobiles, 28.4 per cent; automobiles and trucks, 11.2 per cent; vehicle parts, 21.1 per cent; gravel, sand and stone, 12.9 per cent; grain, 11.6 per cent; cottonseed, soy bean-vegetable cake and meal, except oil, 10.7 per cent; syrup, sugar and molasses, 10.7 per cent; metals other than iron and steel, 10.9 per cent; cement, 8.9 per cent; machinery and boilers, 8.8 per cent; paper, paperboard and prepared roofing, 8.6 per cent; lumber and forest products, 8.4 per cent; petroleum and petroleum products, 8.2 per cent; lime and plaster, 7.6 per cent; iron and steel, 7.4 per cent; ore and concentrates, 7.1 per cent; and brick and clay products, 5.6 per cent.

Commodity groups for which decreases are estimated and the amount of the decrease include the following: Cotton, 13.9 per cent; potatoes, 8.2 per cent; livestock, 4 per cent; and coal and coke, 0.9 per cent.

Would Halt Free Pickup of Livestock in 3 States

Asserting that revenues do not compensate for the cost of free pickup and delivery of livestock direct from farms to freight stations at certain points in the Middle West, six western railroads are seeking cancellation of this service in a proposal docketed by the Western Trunk Line Committee and the Illinois Freight Association. A public hearing on the matter is scheduled at Chicago during the early part of August.

At present truck lines, operating under contract with the railroads and at the latter's expense, move the livestock to stations. Shippers using their own trucking facilities are allowed three cents per 100 lbs.

The proposal covers shipments from certain points in Illinois, Iowa and Wisconsin to specific markets in those states, all within 240 mi. of each point. It would affect the Illinois Central, the Chicago, Milwaukee, St. Paul & Pacific, the Chicago Great Western, the Chicago, Rock Island & Pacific, the Chicago, Burlington & Quincy and the Chicago & North Western.

Children's Travel to Camps at Prewar Volume

The movement of children from New York to summer camps in New England and New York, which has been at its height this week, required 331 sleeping cars and 350 coaches from Grand Central Terminal alone. The peak day for the operation on the New York Central and New York, New Haven & Hartford was July 1, when 7,890 campers were moved out of the station on special cars and special trains between 8 and 11 a. m., according to J. H. Hustis, Jr., terminal manager.

Government Policy on Vacations for R. R. Employees in Canada

The National Labor Relations Board at Ottawa has recommended that Canadian railroad workers "with one year's service should be entitled to six days' vacation with pay, that those of three years' service should be entitled to nine days, and those of five years' to twelve days." The recommendation was issued in answer to an application by unions representing approxi-

mately 65 per cent of the employees of eight Canadian railroads, including the Canadian National and the Canadian Pacific, to extend to fourteen working days the existing annual vacations with pay (see the *Railway Age* of June 21, page 1274).

Because interpretations of the phrase "one year's service" vary greatly from trade to trade, the board said, it did not recommend any particular clause or clauses for insertion into labor-management agreements. The board added it is concerned with laying down only general terms, details of which should be formulated through direct negotiation. The railroads' brief opposing the application of the unions gave *prima facie* evidence of their incapacity to absorb the increased costs involved in accepting the recommendation, the board said in suggesting that the recommendation be brought to the attention of the Board of Transport Commissioners before which an application by the carriers for increased freight rates is pending.

Freight Car Loadings

Revenue car loading figures for the week ended June 28 were not available when this issue went to press.

Loading of revenue freight for the week ended June 21 totaled 901,296 cars, and the summary for that week as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loading

For the Week Ended Saturday, June 21

District	1947	1946	1945
Eastern	164,570	160,761	155,989
Allegheny	191,520	180,640	191,405
Pocahontas	73,199	71,122	57,849
Southern	133,226	131,243	124,055
Northwestern	135,284	118,416	133,171
Central Western . . .	135,925	128,851	140,922
Southwestern	67,572	67,390	73,312
Total Western Districts	338,781	314,657	347,405
Total All Roads	901,296	858,423	876,703
Commodities:			
Grain and grain products	51,260	45,326	56,873
Livestock	12,186	12,310	13,522
Coal	190,685	179,614	171,612
Coke	14,212	12,142	13,282
Forest products . . .	47,967	48,658	45,124
Ore	81,937	62,373	74,623
Merchandise l.c.l. . .	115,249	128,063	106,928
Miscellaneous	387,800	369,937	394,739
June 21	901,296	858,423	876,703
June 14	895,292	867,918	873,322
June 7	900,747	830,128	884,658
May 31	830,383	626,885	837,886
May 24	890,605	571,473	882,753

Cumulative total, 25 weeks 20,824,419 18,136,318 20,384,599

In Canada.—Car loadings for the week ended June 21 totaled 81,409 cars, as compared to 78,109 cars for the previous week and 71,096 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
June 21, 1947	81,409	37,278
June 22, 1946	71,096	36,011
Cumulative totals for Canada:		
June 21, 1947	1,792,594	927,992
June 22, 1946	1,662,435	847,203

A list of current publications appears on page 83.

With the Government Agencies

I.C.C. Acts in Rail-Water Rate Cases

Approves railroads' offer, but ends fourth-section relief along West coast

Making interim reports on two of the rail-water competitive situations it is investigating at the request of the United States Maritime Commission, the Interstate Commerce Commission has vacated outstanding fourth-section-relief orders under which railroads have maintained rates competitive with those of the Pacific coastwise water lines and found that rail rates in that area and on transcontinental traffic would not be in excess of reasonable rates if the Ex Parte 162 adjustment of them were revised to reflect the full 25 per cent increase originally sought in that proceeding. The reports also authorized corresponding increases in Pacific coastwise and intercoastal water rates.

Chairman Aitchison wrote the report on the Pacific coastwise situation which involved No. 29721, All-Rail Commodity Rates between California, Oregon and Washington, No. 29722, Pacific Coastwise Water Rates, and numerous related fourth-section proceedings which had been reopened by the commission for the purpose of requiring the railroads to show cause why the outstanding relief orders should not be vacated. The transcontinental rates were dealt with in a report by Commissioner Alldredge, the proceedings being No. 29663, Transcontinental Rail Rates, No. 29664, Intercoastal Water Rates, and No. 29708, All-Rail, Water-Rail, and Rail-Water Rates between Pacific Coast Ports and Interior Points.

Not Permanent—Both reports emphasized the interim nature of the commission's present determinations. "All concerned," Chairman Aitchison's report said, "recognize that there must be further hearings, necessarily prolonged, and conducted in widely different parts of the country, antecedent to an intelligent and fair determination of the rates involved as a permanent matter."

Aside from adjustments required in connection with the loss of fourth-section relief in the Pacific coast area, the increased rail rates resulting from the reports will be those which the railroads had announced they were willing to propose. The 25 per cent increase above the June 30, 1946, rates will be in lieu of the 20 per cent increase authorized in Ex Parte 162 and now in effect. The Aitchison report vacated the fourth-section-relief orders applicable in the Pacific coast territory as of September 1, and also authorized publication of tariffs

making the approved increases effective not later than that date on the 30 days' statutory notice.

The Alldredge report will permit the adjustment of the rail rates involved, and the intercoastal water rates, on or before August 15, upon not less than 20 days' notice. Here Commissioner Splawn dissented in part. It seemed to him that the commission was not justified on the record in doing more than permitting the carriers to file the rate-increase tariffs, "subject to possible protest and suspension." That is the basis upon which tariffs filed pursuant to the Aitchison report are to be received.

Turns Down Ship Lines' Plan—

Meanwhile, the commission refused at this time to accede to water-carrier requests that, as Commissioner Alldredge put it, "the rail rates should be drastically increased, presumably by a minimum rate order." The water-carrier proposal as to rail rates in the Pacific case was described by Chairman Aitchison as one which "reflects 'what the traffic will bear' under conditions peculiar to water movement."

"They took," he said, "the former water rates, increased them a total of 80 per cent (a 20 per cent increase superimposed upon rates increased 50 per cent), and added varying differentials to reflect the cost to the shipper of switching at the ports, wharfage, marine insurance, and carloading at destination port, plus 10 per cent of the aggregate sums to cover 'intangibles' (the general disadvantage of water service as compared with that by rail). For the rail rates between interior points adjacent to the ports, the water lines suggest increased rates based on the water rates. In many instances the proposal would result in proportional water rates between the ports varying according to the interior origin or destination. The former water rates used as a base were established empirically, without regard for the usual tests of reasonableness and of justness. We have no satisfactory estimate of the total water costs, and *a fortiori*, no apportionment between commodities, or as between ports served. It is obvious that rates so based and then so compounded could not possibly produce as results of the computation rates for rail transportation that are both reasonable and just, or that would meet the standards of section 15(a) of the act."

The commission's action in vacating the fourth-section-relief orders was based on its conclusion that there has taken place since issuance of such orders a "striking change" in the Pacific coastwise common-carrier situation, the change being "so marked as to amount to a complete reversal of the places of the rails and water lines as dominant factors in the competitive struggle for business." In this con-

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House Group Would End Sickness Benefits

"Shocking results" seen stemming from provisions of Crosser Act

The House committee on interstate and foreign commerce last week filed with the House its favorable report on H.R.3150, the bill introduced by Representative Howell, Republican of Illinois, to strike from the Railroad Unemployment Insurance Act the sickness and maternity benefits added last year by the Crosser Act and to place the unemployment insurance tax on a sliding-scale basis which would immediately reduce this levy—paid entirely by the railroads—from 3 per cent to ½ per cent of the taxable payroll. The sickness benefits became effective July 1.

According to the House committee's report, the change proposed with respect to the 3 per cent contribution rate by the railroads will not affect the soundness of the railroad unemployment insurance system, but will "merely correct the injustice to the carriers which has resulted from the overfinancing of that system up to date." The committee said that the railroads, by being required to support a more favorable system of unemployment compensation than has been required of employers in other industries and by being required to pay taxes far in excess of those necessary to support the system, have long been discriminated against as compared with other industries.

Sees Discrimination—"The committee can see no justification for further continuance of this discrimination," the report continued. "It is only fair that the large surplus which has accumulated as the result of the excessive taxes which the railroads have been required to pay in the past should be applied to the reduction of their taxes and for the future instead of being diverted to purposes wholly foreign to that for which the taxes were imposed. Good faith on the part of the government toward its taxpayers demands no less than that."

The committee, noting that the Howell bill makes no other changes in the benefits added by the 1946 amendments or in the benefits provided by the act prior to such amendments, said that there can be "no serious question" that the sliding scale of contribution rates which the measure substitutes for the present flat 3 per cent contribution payable by the railroads will be adequate to insure the solvency of the railroad unemployment insurance account at all times.

"The 3 per cent contribution rate has proven grossly excessive to finance the benefits for unemployment," the report went on. "According to statistics published by the Railroad Retirement Board . . . the railroad unemployment insurance account showed a credit balance at the end of the first quarter of this year of approximately \$835,000,000. The total of all benefits that had been paid out of the account up to that time was approximately \$102,000,000, an average of little more than \$12,000,000 per year during the period the system has been in operation. The interest on the funds in the account is now running over \$15,000,000 a year. The minimum tax of 0.5 per cent fixed by the bill, which will automatically become effective upon its enactment, will yield, under existing conditions of railroad employment, over \$20,000,000 a year. With the interest on the account, that will mean a total income of over \$35,000,000 a year, which is approximately three times the average amount of the annual benefit payments made from the account during the period the system has been in operation."

Lower Tax Rate Adequate—The committee, observing that there is "nothing novel" about the proposal of the bill that a graduated rate of contributions be payable by employers, said that if any time the rate in effect should be insufficient to finance the benefits, it will be increased automatically to a level sufficient to insure the maintenance of adequate funds in the account at all times for the payment of all benefits. "The opponents of the bill," it added, "make no serious contention that the taxes for which it provides would be inadequate to finance benefits for unemployment on the basis now provided in the act."

Commenting on the provisions relating to sickness and maternity benefits, the committee said that the plan adopted in the act for determining eligibility for, and the measure of, the benefits which it provides produces "shocking results" when applied to benefits for sickness and maternity financed wholly at the expense of the employers. It contended further that if the amendments providing for benefits on account of sickness and maternity remain in effect, more than 500,000 men and women—on the basis of Railroad Retirement Board reports—whether or not they ever again have any connection with railroad work, will be entitled to benefits on account of illness or injury of any sort—or childbirth in the case of women—occurring during the 12 months beginning July 1.

As an example, the committee said that a man who went to work for a railroad for the first time in the early part of 1947 would be entitled to benefits for illness or injury during the 12 months beginning July 1, 1948. "The result is that if a person works for a railroad in only one year he can qualify for benefits only during the benefit year beginning on July 1 of the following year," the committee said.

What Crosser Put Over—"Take as an extreme example the case of a man who worked for a railroad for the first and only time during January of this year and earned as much as \$150," the report added. "He might have left to take a job in some

other industry or to go into business for himself. Yet, if at any time during the period from July 1, 1948, to June, 1949 (anywhere from 17 months to more than 28 months after he had left his railroad employment), he should suffer an occupational injury in connection with his new job, should he be injured in an automobile accident or by slipping in his bathtub, or otherwise become disabled for work for any conceivable reason, he would be entitled to collect benefits under the 1946 [Crosser] amendments, from a fund provided solely from taxes imposed on the railroads."

According to the committee, the non-occupational sickness and maternity benefits provided by the Crosser amendments "created a new pattern" of social security applicable exclusively to railroad employees and supported by a tax solely on employers. "Such action was entirely without precedent, so far as the committee is advised," the report said. "Certainly it is without precedent in this country."

The committee said that Congress took "premature and ill-advised" action last year in enacting the sickness and maternity benefit provisions. "The question of legislating with respect to sickness and maternity benefits, matters which relate to the hazards and needs common to all mankind, is one which should be dealt with by Congress, if at all, only after full study and consideration of all aspects of the subject," it continued. "Such features belong in the realm of social insurance and, if they are to be dealt with by federal legislation, that legislation should be of a general nature, applicable to all employees of all industries alike. A railroad employee stands in no different position from the employees of any other industry so far as concerns the need of protection against non-occupational sickness and accidents, or maternity."

"The very basis of social security should be equality of treatment. In setting up a special system of sickness and maternity benefits for railroad employees alone, it is clear that the 1946 amendments created discrimination between large sections of American citizens in the matter of pure social security, where there should be no discrimination between one citizen and another citizen. It is also to be borne in mind, in this connection, that a system providing social-security benefits exclusively for railroad workers must, in the final analysis, be supported and paid for by the public, as costs to the carriers are inevitably reflected in the level of railroad rates."

Failure to Observe Explosives Rule Costs Rock Island \$500

The Interstate Commerce Commission has been advised that trustees of the Chicago, Rock Island & Pacific were fined \$500 on May 26 upon their pleas of guilty entered April 28 to an information in five counts charging violation of section 233 of the Criminal Code. The fine resulted from the failure of Rock Island employees to comply with the commission's regulations governing the transportation of explosives and other dangerous articles.

According to the commission, the Rock Island (1) cut off cars loaded with and

placarded "Explosives" while in motion and permitted them to run on their own momentum into a track; (2) placed a carload of freight placarded "Explosives" in a through freight train three cars behind the engine; (3) failed to furnish a train crew with notice of a carload of explosives in a freight train; and (4) failed to stamp or write the word "Explosives" on the envelope containing the waybill covering a carload shipment of explosives.

May Employment

Railway employment increased 1.58 per cent—from 1,344,853 to 1,366,094—during the one-month period from mid-April to mid-May, and the mid-May total was 4.54 per cent above that of May, 1946, according to the preliminary summary prepared by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission. The index number, based on the 1935-39 average, was 134.4 for May, as compared with 133.9 for the previous month and 128.6 for May, 1946.

May employment was above that of the corresponding 1946 month in six groups, the increases ranging from 0.04 per cent in the professional, clerical and general category to 9.65 per cent in the transportation (train and engine service) group. The only decrease was 0.89 per cent in transportation, other than train, engine and yard.

As compared with the previous month, there were increases in employment in five groups, ranging from 0.05 per cent in transportation (yardmasters, switch-tenders and hostlers), to 6.99 per cent in the maintenance of way and structures category. The only decreases were 0.07 per cent in the professional, clerical and general category and 0.35 per cent in transportation, other than train, engine and yard.

1946 Commodity Statistics by Geographical Areas

The Interstate Commerce Commission's Bureau of Transport Economics and Statistics has made public its statement No. M-550 for the year 1946, showing for Class I roads the tons of revenue freight originated and terminated in carloads by classes of commodities and by geographical areas. The commodity-group figures total to 1,342,229,912 tons originated and 1,255,802,825 tons terminated.

The "geographical areas" breakdown is by states, except that the six New England states are grouped together. The big originator and terminator is Pennsylvania, where 225,371,081 tons originated and 158,301,721 tons terminated last year. Pennsylvania also originated and terminated forwarder traffic amounting to 140,562 tons and 55,728 tons, respectively, but the leader in that category was Illinois, with 1,042,545 tons originated and 744,026 tons terminated.

Illinois also led as the largest originator of agricultural products with 13,370,914 tons and as the biggest originator of animals and products with 2,645,798 tons. It also was the leading terminator of agricultural products with 13,285,429 tons, while New York, with 2,856,547 tons, was the foremost terminator of animals and products.

Pennsylvania was the leading originator

and terminator of mine products with 173,451,168 tons and 106,873,010 tons, respectively, and also led the manufacturers and miscellaneous group, with 49,360,175 tons originated and 39,104,328 tons terminated. Oregon, with 10,798,761 tons originated, and Washington, with 7,355,618 tons terminated, led the forest products category.

Examiners Recommend Higher Rates for Special Trains

Making a proposed report in the I. & S. No. 5457 proceeding, Examiners H. M. Brown and A. C. Wilkins have recommended that the Interstate Commerce Commission should find that the increased charges for special passenger trains and special baggage car service proposed by schedules now under suspension are just and reasonable and should vacate the suspension order and discontinue the proceeding.

The proposed rates would increase by a minimum of 25 per cent the charges for the exclusive use of special trains and special baggage cars. The tariffs would raise from 100 to 125 the number of first-class round-trip fares required for the operation of a special train and increase the minimum charge for special trains from \$132 to \$165. It also is proposed to increase from 20 to 25 the number of first-class passengers required to warrant a special baggage car. When there are less than 20 persons in the party, the present minimum requirement for the use of a special baggage car is now 10 adult fares plus a charge of 10 fares for the use of the car, while under the proposed tariffs the minimum number of fares for passengers accompanying the baggage car would be 12½ plus 12½ fares for the use of the baggage car.

For furnishing special baggage cars unaccompanied by passengers, the minimum requirements will be 25 first-class fares instead of 20, although it is not proposed to make any increase in the minimum of \$33 for such use of a special baggage car. All present charges for special baggage cars and special trains have been in effect since July 1, 1937.

The proposed schedules filed to become effective February 1, were suspended by the commission until August 31, following protests from theatrical groups.

Eastern Roads Seek to Modify Passenger Fare Increases

Eastern railroads have asked the Interstate Commerce Commission to reconsider and modify the order of May 20—in which it authorized those carriers to increase their basic one-way fares from 2.2 to 2.5 cents per mile in coaches and from 3.3 to 3.5 cents per mile in parlor and sleeping cars—so as to permit publication of reduced round-trip fares on trips of not less than 200 miles and to authorize a minimum increase of 5 cents in one-way fares.

As reported in *Railway Age* of May 24, page 1091, the commission, denying the carriers' request to set 200 miles as the minimum distance on reduced round-trip fares, said that the railroads offered no justification for failure to continue the present practice of according some reduc-

tion under the double one-way fares for distances between 100 and 200 miles and authorized no change in the present practice.

The railroads contend that the proposal to make reductions in round-trip fares for distances of 200 miles and more, rather than for distances of 100 miles and more, is designed to have this traffic more nearly bear its portion of the increased expenses and to comply, to the extent that competition will allow, with the past admonitions of the commission that fares less than the maximum level should be raised to meet the railroads' needs for additional revenue. The petitioners said that the Pennsylvania, for example, would realize approximately \$700,000 a year in additional revenues should the minimum distance on round-trip fare reductions be increased to 200 miles, and approximately \$500,000 annually should the minimum increase in one-way fares be set at 5 cents.

The Eastern roads said that their proposal to increase the one-way basic fares by a minimum of 5 cents per fare is designed to have all passengers pay at least an additional 5 cents per ride and share equitably in the increased expenses which have recently been incurred in providing passenger service. The commission had ruled in May that the authorized one-way increases should be subject to the so-called fractional rule, which it had prescribed the previous month in its order approving passenger fare increases on the New York, New Haven & Hartford, as reported in *Railway Age* of April 19, page 809.

I. C. C. Acts in Rail-Water Rate Cases

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section reference was made to the "virtual cessation" of Pacific coastwise shipping during the war.

Water Service Irregular—Thus the commission found itself confronted with a situation similar to that presented in *Transcontinental Rates*, 46 I. C. C. 236, decided June 30, 1917, when it withdrew pre-existing fourth-section relief accorded the transcontinental rail lines. "There," Chairman Aitchison said, "we found as to inter-coastal water service, as we must find here as to water carrier service between the north and south Pacific coast ports, that the present service by water is infrequent, sporadic, and irregular," although it appeared that the condition was temporary and might be changed when the causes thereof ceased."

Chairman Aitchison found a "closer parallel" in *Citrus Fruits from Florida to North Atlantic Ports*, 266 I. C. C. 627, which was decided December 10, 1946 (see *Railway Age* of December 21, 1946, page 1058). "This report," he said, "is so recent . . . and in point of fact so apposite to the present proceeding, as it grew out of an almost parallel state of facts, that we follow it here without amplification or quotation."

At the same time, the railroads were assured that the vacation of the relief orders would be without prejudice to their rights to apply again should Pacific coastwise water competition "again become

actual, compelling, and controlling." The fourth-section orders to be vacated are Nos. 10425, 10688, 10722, 11365, and 14115, as amended.

In authorizing the railroads to file tariffs carrying the rate increases they agreed to make, the Aitchison report said they might propose similar increases on class and commodity rates between the same points but not specifically involved in the proceeding. It added, however, that the record indicated that grain, flour, lumber, bulk salt, citrus fruit, woodpulp iron and steel, aluminum and its products, and dried beans, dried peas, and lentils "should be excluded from this suggestion."

Other Adjustments Due—The report also told the railroads that withdrawal of the fourth-section relief would afford them an opportunity to remove "unwarranted and unjustifiable disparities" in the coastal rates as compared with those from and to interior points. Previously it had been noted that the level of the north and south rates between the ports is "in general lower—and in instances markedly lower"—than that of the east and west rates between the Pacific and interior points, or between inland points. "With the disappearance of the former strong competition afforded by the coastwise water lines, there is now no justification for marked disparities that were created because of water competition," the report added.

Meanwhile, Chairman Aitchison had reminded the water carriers that they were free to propose any rates they desire, for their present rates are not held by any commission orders. He also assured them that the commission "will give prompt attention to their proposals, and, on this record, we are impelled to say we will accord every presumption in the way of respect for the exercise of their managerial discretion."

In authorizing the transcontinental rate increases proposed by the railroads, the Alldredge report said that dried beans, dried peas, and lentils from Washington, Oregon, and Idaho, should be excepted "in order to avoid disruption of the existing parity rates on this commodity between producing districts in northern and southern Idaho." Also, in that report, the commission expressed its belief that there should be no increase in rates on aluminum and its products, "since the general increase permitted for them in Ex Parte No. 162 was the same as that authorized for basic iron and steel, and the latter are excepted from the interim proposals here."

Department of Justice Still Fights Bulwinkle Bill

With the Department of Justice as the principal opponent to the proposed legislation, the House committee on interstate and foreign commerce concluded hearings this week on S.110 and H.R.221, the companion bills introduced by Senator Reed, Republican of Kansas, and Representative Bulwinkle, Democrat of North Carolina, respectively, to stay the operation of the anti-trust laws with respect to carrier rate-making procedures and other joint actions approved by the Interstate Commerce Commission. As noted in *Railway Age*, of June 21, page 1252, the Senate on June 18

passed an amended version of Senator Reed's measure.

Albert Boggess, special assistant to Attorney General Clark, told the committee that the proposed legislation would "set up machinery that could permit powerful groups to destroy free competition enterprises in our transportation industry by immunizing agreements in restraint of trade from prosecution under the anti-trust laws." In testimony similar to that offered earlier this year when the Senate committee on interstate and foreign commerce was considering S.110, Mr. Boggess declared that "a monopoly group already well entrenched in our transportation industry" seeks, through enactment of the Reed-Bulwinkle bills, to secure immunity from the rule of competition under the Sherman Act.

What Justice Dept. Fears—"The apparent purpose in proposing enactment of this bill is to attempt to deprive the courts of jurisdiction in pending anti-trust cases instituted by the government in the district court at Lincoln, Nebr., and by the state of Georgia in the Supreme Court," Mr. Boggess said. "The Department of Justice opposes this bill because it would remove a very large segment of American industry from accountability to the public under the anti-trust laws. . . . Congressional approval of private regimentation of the transportation industry would encourage the immunization of private controls in other industries. Because transportation is a basic factor in every industry, the exception of the transportation industry from the law of competition would seriously complicate our problem in enforcing the anti-trust laws in the remainder of the economy."

Asserting that the anti-trust laws apply to all industries, including the transportation industry, Mr. Boggess said that the regulatory scheme which has been provided by Congress for the regulation of the railroads has always contemplated that the principal reliance for the protection of the public would lie in competition between the carriers. "The anti-trust laws have repeatedly been applied to the transportation industry without in any way impairing the proper exercise by the Interstate Commerce Commission of the regulatory power entrusted to it by Congress," he said.

The witness stated that the bills would sanction the elimination of competition among the several competitive modes of transportation as well as among the carriers within one class. He said that the Pennsylvania, for example, would be allowed to participate in determining joint rates and through routes "even though the movement of traffic is confined entirely to the South and West and could not possibly move over the lines of the Pennsylvania Railroad." He said also that the P.R.R., under the provisions of the pending legislation, could influence the determination of a joint rate in the West between western railroads and connecting trucks or water carriers in the West. He added that the standards to be applied by the I.C.C. in delegating to private groups the "comprehensive powers" envisioned by both bills are "general, vague and ambiguous."

Mr. Boggess said that the provision of S.110 which states that no bank or other financial institution shall be a member of any conference, bureau, committee or

other organization offers "little protection." "Banks and financial institutions are not now members of carrier organizations, although extremely influential in such organizations," Mr. Boggess said. "Economic pressures may be exerted by financial interests, as they have been in the case of the Western Commissioner Agreement, by participating indirectly in, but in conformity with, the proceedings of the carrier organizations without direct membership therein."

Sees Ambiguity—Mr. Boggess also described as "ambiguous" an amendment to S.110 which provides in part that the enactment of the proposed legislation shall not deprive the Supreme Court of the United States of jurisdiction to hear and determine the anti-trust suit filed by the state of Georgia in the Supreme Court. He said that if the Reed-Bulwinkle bill is enacted and the Supreme Court thereafter enters a decree in the Georgia case prohibiting the defendant railroads in that case from doing the things which would be authorized under the bill, the Supreme Court will supplant the "Act of Congress" as to the carriers who are defendants in the Georgia case. "The consequence would be that some of the nation's railroad carriers might well be denied exemptions from the anti-trust laws which the remainder of the railroads, the motor carriers, the pipe lines, the water carriers and the freight forwarders would enjoy," he said. "Such an unequal application of the law could hardly be desirable from the point of view of policy." Mr. Boggess, whose contentions were later supported by Arne C. Wiprud, former special assistant to the attorney general, and author of "Justice in Transportation," said that the Justice Department has "consistently maintained" the position that the jurisdiction of the courts to decide both the Georgia and Lincoln cases should be preserved.

"Our objection to this bill is not removed, however, by the amendment to S.110 preserving the jurisdiction of the Supreme Court to decide the Georgia case," he concluded. "The department objects to this bill because it provides machinery which would permit private groups to eliminate competition from the transportation industry. The question presented by this bill is whether we should abandon the principles of free competitive enterprise in the transportation industry. This bill seeks to substitute a private regimentation of the transportation industry for the competitive system which now obtains within that industry under the Interstate Commerce Act."

Prior to Mr. Boggess' presentation, the committee heard numerous proponents of the measure, including J. Carter Fort, vice-president and general counsel of the Association of American Railroads; Clyde B. Aitchison, chairman of the I.C.C.; Colonel J. Monroe Johnson, director of the Office of Defense Transportation; Roland Rice, general counsel of the American Trucking Associations; F. G. Hamley, general solicitor, National Association of Railroad and Utilities Commissioners; A. B. Barber, manager, transportation and communication department, Chamber of Commerce of the United States; J. G. Scott, general counsel, National Association of Motor Bus Operators; Giles Morrow, executive secretary

and general counsel, Freight Forwarders Institute; and J. E. Bryan, chairman of the National Industrial Traffic League's legislative committee.

Carriers' Views—Mr. Fort contended that enactment of the bill would insure maintenance of an adequate and economical transportation system and would "remove the conflict" that has arisen between the national transportation policy, as laid down by Congress, and the policy of the anti-trust laws as interpreted by the Department of Justice. Declaring that the legislation does not grant railroads and other carriers immunity from the anti-trust laws, Mr. Fort said that its purpose is to "bring to an end the confusion, uncertainty and inconsistencies which now threaten serious harm to all interests, and particularly to shippers, who are now concerned with an adequate transportation system capable of rendering economical and efficient service to the public under reasonable and non-discriminatory rates."

Speaking specifically of H.R.221, Mr. Fort said that the bill leaves the anti-trust laws applicable with full force and effect to carriers, so far as they are now applicable, except as to such agreements and arrangements as have been submitted to the I. C. C. and approved by that body. "Carriers, subject to regulation under the Interstate Commerce Act, the bill provides, may lawfully enter into agreements which meet certain standards set forth in the bill and have been found by the . . . commission, after hearings, to meet those standards," he said. "The bill would not impair or in any way affect the authority which the commission has over rates and practices over carriers, but would authorize the commission to draw the line between collective action on the part of the regulated carriers which is permissible and that which is not, by the application of standards prescribed by Congress in the bill."

After pointing out that the bill has received an "unprecedented unanimity of support" from virtually all governmental and private interests which are "directly responsible for, or concerned in, or affected by," transportation, Mr. Fort said that, as part of "propaganda" against the bill, it has been charged that the conference method of considering rates results in a high rate level. "If this were so," he commented, "is it to be supposed that the bill would have the unanimous shipper endorsement which it has?"

Effect On Rates—Mr. Fort told the committee that although the conference method of rate making has been in effect since before World War I, the average revenue per ton-mile in 1946 was 25 per cent below that of 1921 and the average revenue per passenger-mile more than 35 per cent below "despite the increases that have taken place in the cost of railroad operation." He added that during the World War II years when, he said, the volume of traffic reached "peaks never dreamed of," the average rate of return was less than 5 per cent and in 1946, the first postwar year, "considerably less" than 3 per cent.

"If the conference system of rate consideration were the instrument of monopoly and oppression, as has been charged in con-

nection with these bills, certainly it would seem that in the years when that system was in effect the earnings of the railroads would not have been in any such meager figures as these," Mr. Fort said. "These facts would seem to be a complete answer to those who have tried to claim that the system of regulation which was built up in the country over the past 50 years is not sufficient to protect the public against an excessive rate level.

"The rate level of the railroads since the first world war was not held down by the anti-trust laws, but was determined by the system of regulation. It was not until the last 4 or 5 years that it occurred to anyone that the anti-trust laws should be or could be employed to confound and confuse the orderly operation of our system of railroad regulation. The rates and earnings of railroads of the United States in the past 25 years, with the conference method of rate consideration, have not been excessive. On the contrary, they have been too low."

Appearing on behalf of the commission's legislative committee, Chairman Aitchison read a letter written February 17 to Representative Wolverton, Republican of New Jersey, and chairman of the House committee with respect to H.R.221, in which the commission favored enactment of the bill. The letter noted in part that the commission is in accord with the "general objective" of the bill and for several years in its annual reports has recommended legislation "to provide adequate regulation of two or more common carriers or freight forwarders, subject to the [Interstate Commerce] Act, when they agree upon and act jointly through a bureau, conference, or association in establishing rates, fares, charges, etc., subject to the provisions of the act." The letter also recommended that the bill, as written, be amended so as to give the commission authority to require reports from rate bureaus and other organizations maintained by carriers or their associations and to inspect their records and accounts.

Reorganization Plan Approved for D. S. S. & A.

Division 4 of the Interstate Commerce Commission has approved a plan of reorganization for the Duluth, South Shore & Atlantic and its subsidiary, the Mineral Range, under which the capitalization of the road will be reduced from \$46,650,755 (exclusive of \$29,559,157 in accrued and unpaid interest on funded debt) to \$15,500,000. The present capitalization of the M. R. is \$3,601,756, exclusive of \$1,576,763 in accrued and unpaid interest on funded debt. Claims are computed as of January 1, 1945.

The approved capitalization and charges are shown in the accompanying table:

	Amount	Annual Requirements
First-mortgage 4 per cent 50-year bonds	\$ 5,000,000	\$200,000
Sinking fund		25,000
Total debt	\$ 5,000,000	
Common stock (no par value, stated at \$50 a share)	10,500,000	
Total capitalization	\$15,500,000	

The new bonds would be on a contingent interest basis, cumulative under prescribed conditions. The public holders of the old

5 per cent bonds would receive \$1,919,400 in bonds and \$401,309 in cash. The Canadian Pacific, as the holder of the remaining secured obligations of the two debtor roads, would receive \$3,078,600 in bonds, \$828,597 in cash and \$10,500,000 in stock. The C. P. R. holds all but 8 bonds of the M. R. and the holders of those securities would receive \$250 principal amount of new bonds and \$9 in cash for each \$1,000 held.

Public holders of the debtor's 5 per cent bonds and the C. P., as holder of 801 5 per cent bonds and all other bonds of the D. S. S. & A. and M. R., would receive for each \$1,000 principal amount approximately the following amounts of new securities and cash:

	Cash	First Mortgage Bonds	Common Stock
Public holders of 5's	\$125.45	\$600	
Canadian Pacific	43.83	162.88	\$555.48

The commission also found that the interests or equities of (1) holders of the debtor's preferred and common stocks and the capital stock of the M. R.; (2) holders of claims against the debtor, other than the 6, 5 and 4 per cent bonds; and (3) holders of claims against the M. R. other than the Hancock & Calumet 5 per cent bonds, the M. A.'s 5 and 4 per cent bonds of 1890 and 4 per cent bonds of 1901, have no value. The plan therefore made no provision for their participation.

Unions Have Right to Join in All I. C. Act Cases

Section 17(11) of the Interstate Commerce Act gives representatives of railroad employees an "absolute" right to intervene in "any proceeding," arising under the act—whether before the Interstate Commerce Commission or the courts. The United States Supreme Court has so ruled in an unanimous opinion delivered June 9 by Justice Murphy.

The Supreme Court had under consideration the appeal of the Brotherhood of Railroad Trainmen from an order of the U. S. District Court for the Northern District of Illinois, Eastern Division. The lower-court order had denied the brotherhoods petition for leave to intervene in litigation arising out of the undertaking of the New York Central and Chicago River & Indiana to discontinue arrangements whereby other Chicago roads used their own power and crews to move their empty and loaded livestock cars over tracks of the Chicago Junction (lessor of the River Road) to and from loading places in the Chicago Union Stock Yards.

Justice Murphy found the origin of the present litigation in the I.C.C.'s May 16, 1922, order approving transactions whereby N.Y.C. acquired all of River Road's capital stock and River Road leased Junction's properties. The arrangements under which the other roads operated over Junction's properties (for which privilege they paid \$1 per car, loaded or empty) were in effect prior to the commission's order; and that order made various conditions, including one requiring continuance of the previous traffic and operating relationships "in so far as such matters are within the control of Central."

On January 25, 1946, Central and River Road notified the other roads that on and

after February 1, 1946, the livestock cars would be moved by River Road power and crews and that the handling charge would be \$12.96 per outbound loaded car. Soon after these new arrangements were installed, the affected trunk-line railroads brought suit to enjoin their continuance. They claimed that the new practice was in violation of the above-mentioned condition of the I.C.C.'s 1922 order. The commission was allowed to intervene, and it, too, alleged violation of the condition and prayed for an injunction.

A stipulation of facts filed by the parties with the district court stated, as summarized by Justice Murphy, that the change in practice "resulted from a settlement between the River Road and the Brotherhood of Railroad Trainmen of a labor dispute over the work involved in the handling of these livestock car movements." The brotherhood, representing River Road trainmen, threatened to call a strike unless those trainmen were given the work involved. "Under this threat," Justice Murphy continued, "River Road made an agreement with the brotherhood shortly before the scheduled strike hour."

The district court granted the injunction, meanwhile concluding, as a matter of law, that the facts relative to the labor dispute were "irrelevant and immaterial." After the injunction became effective, the brotherhood made its unsuccessful effort to intervene. Consideration of its appeal by the Supreme Court was opposed by the railroad parties who contended that the brotherhood was not entitled to intervene as a matter of right. As noted above, the Supreme Court rejected that contention.

After considerable discussion of the matter and the applicable precedents, Justice Murphy came around to his pronouncement of the court's finding that the I.C. Act's section 17(11) confers an "absolute" right on the employee representatives. As he put it, the section's statement that such representatives "may intervene" in "any proceeding arising under this act" means "may intervene if the employees' representative so chooses," rather than "may intervene in the discretion of the court." Meanwhile Justice Murphy had previously stated that "any proceeding arising under this act" means proceedings before the courts as well as those before the commission.

1946 Crossing Accidents

Accidents at rail-highway grade crossings during 1946 resulted in the death of 1,851 persons and injuries to 4,397, according to the latest compilation by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission. In 1945, 1,903 persons were killed and 4,446 injured.

Crossing accidents last year totaled 4,001, as compared with 4,100 in 1945, a decrease of 2.41 per cent, while fatalities and injuries declined by 2.73 per cent and 1.10 per cent, respectively.

Another tabulation shows that the 1946 crossing fatalities accounted for 44.42 per cent of the persons killed that year in all railroad accidents resulting from train operation. This compares with 42.62 per cent in 1945 and 40.64 per cent in 1944.

Crossing accidents accounted for 14.52 per cent of 1946's non-fatal injuries, as compared with 12.43 per cent in 1945 and 12.01 per cent in 1944.

Road freight trains were involved in 43.78 per cent of the 1946 crossing accidents, while passenger trains were involved in 41.70 per cent of the total. The number of grade-crossing accidents per million train-miles was higher in 1946 for all kinds of trains, except work trains, as compared with 1945, the frequency rate being 2.63 per million train-miles in 1946 (as compared with 2.26 in 1945 for freight trains and 3.30 for passenger trains, as compared with 3.17 in 1945. Approximately 65 per cent of the accidents in which the motor vehicle was struck by the train occurred in daylight, while about 74.22 per cent of those in which the motor vehicle ran into the side of the train occurred after dark.

As was the case in 1945, December was the 1946 month in which the greatest number of crossing accidents occurred. Saturday, which has held first place since the compilation was first begun in 1935, remains the day of the greatest accident frequency. The weather was reported "clear" when 71.89 per cent of the accidents occurred; and the speed of the motor vehicle was given at "standing" or moving at not more than 30 m. p. h. in 58.61 per cent of the accidents involving motor vehicles. Standing freight trains were involved in 9.14 per cent of the total freight train-motor vehicle accidents involving freight trains.

"The number of railway accidents in general is affected materially by the volume of railway traffic," the bureau observed. "However, the frequency of accidents at grade crossings of railroads and public highways is affected not only by the volume of rail traffic, but also by the amount of traffic on the highways. The chances for these accidents are modified somewhat by the extent and the efficacy of the protective measures which are taken through the use of signs, watchmen and mechanical devices for accident prevention. But it should be emphasized that the degree of care exercised by drivers of highway vehicles and the mechanical condition of those vehicles are extremely important factors."

King Returns to I. C. C. as Service Bureau Director

Homer C. King, who has been deputy director of the Office of Defense Transportation, has been reappointed to his former position of director of the Interstate Commerce Commission's Bureau of Service. He succeeds V. C. Clinger, who will resume his former position as service agent with headquarters at Dallas, Tex.

Car Supply Caucus Hears From Great Northern Officer

Appearing recently before the executive committee of the so-called western states caucus, which is investigating alleged discrimination against the West with respect to the distribution of freight cars, V. P. Turnburke, vice-president of the Great Northern, asserted that "so far as the

Great Northern is concerned . . . congressional action has materially aided in bringing about the improved situation which exists today."

Mr. Turnburke declared that one of the "principal reasons" for the shortage of cars on the G. N. is the "universal car shortage." "During the war years," he said, "it was not possible to secure materials and labor for the construction of additional cars, and the present situation is still unfavorable."

"Effective Pool"—"The movement of loaded box cars from originating Great Northern territory into the consuming and manufacturing centers of the East has resulted in a piling up of cars in that section, and although the cars have been returned to the West in fairly large quantities, there seems to have been a poor distribution of cars among the various western roads," Mr. Turnburke remarked. "For example, as of March 1, when the Great Northern had only 58.6 per cent of its ownership of box cars on line, the figure for all roads in the western district was 92.7 per cent of ownership of box cars, and in the northwestern region, of which the Great Northern is a part, the roads other than the Great Northern had 97.3 per cent of their ownership of box cars on line. It is not solving the problem of where to find box cars for Great Northern shippers by providing a substantial supply of cars in the western territory unless these cars get on Great Northern lines, and this they certainly have not been doing."

Mr. Turnburke stated that the box car supply is "effectively pooled," although, at the same time, he described as a "mystery" the basis used by the Car Service Division of the Association of American Railroads for distributing the cars between the railroads.

"Speaking for the Great Northern," he continued, "it is our belief that sufficient importance has not been given to the ownership of cars. We have invested large sums in our freight car equipment for the purpose of serving our shippers, and it is very disconcerting to be unable to furnish cars upon demand."

Noting that no elevators are blocked and all G. N. car orders are being filled, Mr. Turnburke said that "at the present time, there is nothing approaching a car shortage on the Great Northern." He added that as of June 1, the G. N. had 102.7 per cent of its ownership of box cars on line, as compared to 118.4 per cent as of the middle of May.

"An ample supply of freight cars and fair distribution is now, and has been for some time, a question of the utmost economic importance," Mr. Turnburke continued, after noting that the G. N.'s net ton-miles per car-day was 500 in 1926, as compared with 996 in 1946. "Car shortages and their stagnating influence on the movement of traffic will not be eliminated until sufficient cars have been constructed to amply take care of the demand. Until that time arises, there will be a question of how to fairly and equitably distribute the available car supply. This is not an easy matter, nor is it one of simple solution."

Questioned by Representative King, Democrat of California, Mr. Turnburke asserted that the A. A. R. has not discriminated against the West in the distribution of cars. At the same time, he criticized top-ranking officers of the A. A. R. who earlier this year, he said, had contended that "40 to 50 per cent of ownership on line" was a "fair share" of cars for the West.

Bad Situation in Winter—"We didn't need 100 per cent of our ownership on line when our grain elevators were blocked, but more than 57 per cent would have helped," Mr. Turnburke added. "When the pressure was on from our shippers, we would have sold our souls for 10 cars. Now we have more than enough and that's quite embarrassing. The situation has improved, maybe as a result of change in A. A. R. management or the result of congressional investigations."

Mr. Turnburke declared that "there is not much chance" of the demand for box cars on the G. N. continuing at its recent pace, adding that the situation should improve as the car-building program gets under way.

Asserting that a per diem rate in the neighborhood of \$2 would act as an incentive toward more car building by the carriers, Mr. Turnburke said that the railroads, rather than the Interstate Commerce Commission, should establish the per diem rate. Under normal conditions, he continued, per diem is used merely to compensate the car-owning road for its investment and not necessarily to result in the car being returned to its home road. "If cars are plentiful, they will come back regardless of the per diem rate," he said.

Commenting on a newspaper advertisement which the Great Northern ran in March, in which it stated that it needed 20,466 box cars, Mr. Turnburke said that the ad was prompted by the fact that the road had 13,737 box cars on line at that time, of which it owned only 3,323, as compared to a total box car ownership of 23,789 units. He said that box car ownership on line at the same time in the Eastern and Allegheny districts totaled 110 and 103 per cent, respectively.

With respect to reported car shortages resulting from alleged circuitous routing, Mr. Turnburke blamed the government for its past practice of routing shipments wherever possible over land-grant routes.

Export of Freight Cars Put Under Control

Freight cars were placed under export control June 30, the Office of International Trade, Department of Commerce, has announced. The announcement said that the action was necessary to make certain that large export orders for freight cars will not interfere with supplying urgent domestic needs.

Two Emergency Boards

Chairman F. P. Douglass of the National Railway Labor Panel has appointed emergency boards from the panel to investigate disputes between the Florida East Coast and certain of its employees represented by the International Association of Railway Employees and between the Missouri Pa-

cific and certain of its employees represented by the Railroad Yardmasters of America. The F. E. C. dispute is understood to involve adjustments in the wage rates for train porters, while the M. P. dispute concerns revisions in wage rates and rules.

Dr. Stevens of I. C. C. Staff Awarded Honorary Degree

Dr. W. H. S. Stevens, director of the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission, was awarded the honorary degree of Doctor of Social Science by Colby College on June 30. The statement of President Bixler of Colby cited Dr. Stevens for "outstanding work in your chosen profession."

Representation of Employees

The Order of Railroad Telegraphers has retained the right to represent Great Northern agents, telegraphers and tower-men as the result of a recent election which has been certified by the National Mediation Board in which it defeated the United Railroad Workers of America, Congress of Industrial Organizations, 1,269 to 139.

O. K.'s Nickel Plate Purchase of More W. & L. E. Stock

Division 4 of the Interstate Commerce Commission has authorized the New York, Chicago & St. Louis to acquire further control of the Wheeling & Lake Erie through purchases of remaining Chesapeake & Ohio and Alleghany Corporation holdings of that road's stock. The report also approved the resultant relationships between Wheeling and C. & O.-Alleghany, authorizing those two companies to acquire, through Nickel Plate, the further control which that road will acquire of Wheeling.

The approved transactions involve purchase by the Nickel Plate of 115,369 shares of Wheeling prior-lien and 1,658 shares of its preferred stock from the C. & O. and of 54 shares of the prior-lien stock from Alleghany. The commission deferred action on that phase of the Nickel Plate application which sought authority to purchase from others the remaining 670 shares of the Wheeling prior-lien stock outstanding without limitation as to price.

As the commission pointed out, the Nickel Plate's plan to acquire further control of Wheeling is a sequel to earlier transactions whereby it acquired 78,145 of the latter's common shares from the C. & O. and thus built its holdings of Wheeling's voting stock to 46.9 per cent of the total (see *Railway Age*, issues of December 28, 1946, page 1094, and March 22, page 636). All three classes of Wheeling stock have equal voting rights, and the present acquisition will build Nickel Plate holdings to approximately 68 per cent of the total.

On that basis a merger of the properties could be effected under the laws of Ohio which require a two-thirds assenting vote in such cases. "Unification of the Wheeling with the Nickel Plate or with the Chesapeake & Ohio has been in contem-

plation for some time," the commission said. "Now the attention of the parent company has turned in another direction. With merger of the Pere Marquette into the Chesapeake & Ohio, the latter now has its own lines, substantially parallel to the Nickel Plate, between Chicago and Buffalo. If any subsequent development should operate to disturb Nickel Plate relationships through the Buffalo gateway, the advantage to that carrier of its alternative route through Connellsville will increase in importance, and manifestly, the Nickel Plate will be stronger with the Wheeling than without it."

Previously the commission had referred to proposals pending before it "for affiliation of the Chesapeake & Ohio with the New York Central through stock ownership and common directors, and for divesting the Chesapeake & Ohio of control of the Nickel Plate by depositing with the trustee [Chase National Bank] the Nickel Plate stock owned by the Chesapeake & Ohio in lieu of the New York Central stock which it now owns." Also the report asserted that the commission's present determination was "concerned primarily, not with the Chesapeake & Ohio, but with the future of the Nickel Plate and the Wheeling, and nothing herein is to be construed as prejudicing any determinations hereafter to be made with respect to Chesapeake & Ohio and New York Central relationships."

For the Wheeling stock to be acquired from the C. & O. the Nickel Plate will pay the book cost to that road—\$96 a share for the prior-lien and \$97.35 for the preferred. Alleghany will also sell its 54 shares of the prior-lien stock for \$96 a share, although its cost per share was \$107.50. Payment for the stock will involve a total outlay of \$11,242,401.30 by the Nickel Plate. It plans to pay \$5,242,401.30 from treasury cash and to finance the remaining \$6,000,000 by issuing and selling on the basis of competitive bids a serial note or notes in that amount. The note issue would be secured by all or any part of a \$10,000,000 issue of refunding mortgage bonds and the 115,423 shares of Wheeling prior-lien stock being acquired. The commission approved the plan for the note issue, but deferred entry of an order until the Nickel Plate files certain additional information.

The stock purchases were opposed by a Nickel Plate preferred stockholder, Howard D. McGeorge, but the commission rejected what it considered to be the relevant phase of his protest. As to his request that separation of the Nickel Plate from the C. & O. be required, the commission said that issue was "not properly raised in this proceeding."

Meanwhile, the commission's approval of the present transactions involved extension to them of certain of the conditions that had been imposed in connection with the previous report's approval of the acquisition by Nickel Plate of C. & O.'s holdings of Wheeling common. Such conditions include those stipulating that the Nickel Plate shall not pledge, sell or otherwise dispose of any Wheeling stock without prior commission approval; that no shares of Wheeling stock shall be redeemed, re-

tired, or reacquired by that road, except through donation, unless upon commission approval; and that all routes and channels of trade via existing junctions and gateways be maintained. Also, there are the usual labor-protection provisions.

E. I. Lewis Dies

Ernest I. Lewis, former member of the Interstate Commerce Commission and subsequently director of its Bureau of Valuation, died on July 1 at his home in Washington, D. C. Mr. Lewis, who was 74 years of age, became a member of the commission in 1921 and served until 1933 when he assumed the directorship of the Bureau of Valuation. He retired from the latter position in 1943.

Car Service

I. C. C. Service Order No. 760, effective from June 27 until August 31 unless otherwise modified, directs the Chicago, Burlington & Quincy to reroute traffic (including trains) originating or terminating at points on its Des Moines-Osceola branch between Burch, Iowa, and Des Moines, inclusive, over the Chicago Great Western between Afton Junction, Iowa, and Burch. The order was issued because flood waters have produced washouts at several points on the Burlington branch.

Homer C. King, I. C. C. agent under Service Order 562, has issued amendment No. 2 to King's Order No. 14 which provides for rerouting because of flood conditions. The amendment extends the rerouting authority to cover the states of Illinois, Kentucky, Tennessee and Arkansas in addition to Iowa, Missouri and Nebraska, and postpones the expiration of the order until July 30.

Supply Trade

A. C. Moore, president of the **Chicago Railway Equipment Company**, Chicago, has been elected chairman of the board, a newly created office. He will continue as chief executive officer of the company, and exercise general supervision and control over its affairs. **S. J. Walker**, executive vice-president, has been elected president.

The **Sioux Machinery & Supply Co.**, 315 West Seventh street, Sioux City 17, Iowa, has been appointed an authorized distributor for the **Carboloy Company**, Detroit, Mich., to serve Sioux City, northwestern Iowa, South Dakota, and northeastern Nebraska. **C. W. Monroe**, president of Sioux Machinery & Supply, will be in charge of the new Carboloy operation.

Lloyd W. Hackley, formerly assistant superintendent of production planning of the **American Steel & Wire Co.**, a subsidiary of United States Steel Corporation, has been appointed superintendent of production planning, to succeed **F. J. Boes**, retired. **James E. Rogerson**, formerly general supervisor of procedure and or-

ganization in the production planning department, has been appointed to succeed Mr. Hackley.

Hugh C. Minton, production manager of the **Koppers Company**, has also been appointed a vice-president of the company, with headquarters in Pittsburgh, Pa.

Formation of the **Railroad Siding Construction Company**, with headquarters in Pittsburgh, Pa., has been announced. Present operation of the new company, which is affiliated with the Eastern Pipe Maintenance Company, will be limited to Pennsylvania, Ohio, Indiana, New York, Delaware, Maryland and West Virginia.

The **National Battery Company** has acquired the storage battery division of the **Philco Corporation**, to be operated as a consolidation with its Gould Storage Battery Corporation for the manufacture and sales of industrial storage batteries, it has been announced.

Sumner J. Robinson has been appointed sales manager of the home furnishings division of **Goodall Fabrics, Inc.**, with headquarters in New York.

Equipment and Supplies

Domestic Equipment Orders Reported in June

During June *Railway Age* reported domestic orders for 90 Diesel-electric locomotives, 10,000 freight cars (including 400 ordered by a private car line), and 125 passenger-train cars. All the passenger-

train cars and 1,525 freight cars were ordered from railroad shops. The estimated cost of the locomotives is \$11,210,000. The passenger-train cars will cost approximately \$7,912,000 and the freight cars will cost about \$39,000,000. The accompanying table lists the orders in detail.

Railway Age, during the first half of 1947, has reported domestic orders for 306 Diesel-electric, 1 gas turbine, 4 electric and 10 steam locomotives (at an estimated cost of \$62,985,000), 49,226 freight-train cars (costing an estimated \$191,974,000), and 275 passenger-train cars (the estimated cost of which is \$22,737,000).

LOCOMOTIVES

The **UNION PACIFIC** has ordered three 2,000-hp. Diesel-electric passenger units (two A and one B) from Fairbanks, Morse & Co.; one 1,500-hp. Diesel-electric freight locomotive from the American Locomotive Company; and three 400-hp. Diesel-electric switching engines from the General Electric Company. The estimated cost of this equipment is \$1,000,000.

SIGNALING

The **CHESAPEAKE & OHIO** has placed an order with the Union Switch & Signal Co. covering the necessary signaling materials for the installation of centralized traffic control between Delaware, Ohio, and Marion, approximately 22 mi., and for the remote control of passing-siding switches in the territory from Columbus, Ohio, to Delaware, and from Marion to Cummings (near Toledo), approximately 100 mi. A 20-ft. Style C control machine for handling both the C. T. C. and remote control systems, with the entire 122-mi. track layout indicated on the model board,

will be located in the Spar building in Columbus. The signaled territory will be handled by one pair of code-line wires, with this code line divided into four sections, including one d. c. and three carrier-controlled line sections. In addition to the control machine, the order includes the office and field-code and carrier equipment, Style R-2 color-light signals, Style M-22A dual-control electric switch movements, T-21 hand-throw mechanisms with SL-21 electric switch locks, relays, rectifiers, transformers and housings. The field installation will be handled by the forces of the railroad.

The **TEXAS & PACIFIC** has ordered materials from the General Railway Signal Company to modernize 31 mi. of centralized traffic control between Dallas, Tex., and Fort Worth. The present unit-wire system, installed in 1930, will be converted to the Type F coded system, and a new, modern control machine will be installed at Fort Worth to replace the machine at Arlington, Tex. Type K relays, Models 9A and 10 switch locks, and Types SA and D signals are included in this order.

Financial

ATCHISON, TOPEKA & SANTA FE.—*Track-age Rights.*—Division 4 of the Interstate Commerce Commission has authorized this road to acquire trackage rights over the Denver & Rio Grande Western from a point near Portland, Colo., to a point near Canon City, approximately 13.2 mi. (See *Railway Age* of March 29, page 676.)

ATCHISON, TOPEKA & SANTA FE.—*New Director.*—John L. McCaffrey, president of the International Harvester Company, was elected a director of this road at a meeting of the board of directors in Chicago, June 26.

BESSEMER & LAKE ERIE.—*Annual Report.*—Consolidated operating revenues of this road and its leased lines amounted last year to \$15,770,418, compared with \$17,669,430 in 1945. Operating expenses were \$11,676,313, compared with \$20,602,205. Fixed charges totaled \$762,454, compared with \$808,297. Net income was \$4,004,795, compared with \$824,725. Current assets at the end of the year were \$12,525,294, compared with \$10,699,411. Current liabilities were \$5,173,810, compared with \$111,933. Long term debt was \$18,210,000, compared with \$20,320,000.

CHESAPEAKE & OHIO.—*N. Y. C. Stock and Directorships.*—The Interstate Commerce Commission has permitted the Detroit, Mich., Board of Commerce, the Michigan Public Service Corporation, the State Corporation Commission of Virginia and the cities of Roanoke, Va., and Princeton, W. Va., to intervene in the proceeding wherein this road is seeking to release its holdings of New York Central stock from trusteeship and in the other proceedings wherein Robert R. Young and R. J. Bowman, chairman and president of the C. & O., respectively, are seeking authority to

			LOCOMOTIVES		
Date	Purchaser	No.	Type	Builder	
June 7	A. T. & S. F.	8	6,000-hp. D-E. pass.	Electro-Motive	
		4	4,000-hp. D-E. pass.	American	
		4	1,000-hp. D-E. sw.	American	
		6	1,000-hp. D-E. sw.	Baldwin	
		1	2,000-hp. D-E. transfer	Baldwin	
June 7	C. G. W.	2	1,000-hp. D-E. sw.	Fairbanks, Morse	
		9	1,000-hp. D-E. sw.	Electro-Motive	
June 7	St. L. - S. F.	5	660-hp. D-E. sw.	American	
		26	1,500-hp. D-E. frt. units	Electro-Motive	
		4	1,000-hp. D-E. sw. units	Electro-Motive	
		6	1,000-hp. D-E. sw. units	Fairbanks, Morse	
June 14	Ill. Terminal	6	1,000-hp. D-E. yd.-sw.	American	
		3	1,000-hp. D-E. rd.-sw.	American	
June 21	St. L. Southwestern	5	1,000-hp. D-E. sw.	Baldwin	
		1	2,000-hp. D-E. frt.	Baldwin	
			FREIGHT CARS		
June 14	A. T. & S. F.	250	70-ton Gondola	American Car & Fdy.	
		125	70-ton Cov. Hopper	American Car & Fdy.	
June 14	D. M. & I. R.	500	70-ton Ore	American Car & Fdy.	
June 14	L. & N.	1,500	50-ton Hopper	Bethlehem	
		1,500	50-ton Hopper	Pullman-Standard	
June 14	New York Central	1,000	55-ton Box	Greenville	
		1,000	55-ton Box	American Car & Fdy.	
June 21	B. & O.	25	70-ton Flat	R. R. Shops	
June 21	C. & E. I.	200	50-ton Hopper	Pullman-Standard	
June 21	D. M. & I. R.	500	70-ton Ore	General American	
		500	70-ton Ore	Pressed Steel	
		500	70-ton Ore	Pullman-Standard	
June 21	N. J. I. & I.	100	50-ton Auto	Pressed Steel	
June 21	U. P.	400	70-ton Cov. Hopper	General American	
June 28	G. N.	500	50-ton Box	R. R. Shops	
June 28	Pennsylvania	1,000	50-ton Box	R. R. Shops	
June 28	W. F. E.	400	40-ton Refrig.	American Car & Fdy.	
			PASSENGER CARS		
June 7	C. M. St. P. & P.	56	Coach	R. R. Shops	
		6	Dining	R. R. Shops	
		2	Din.-Lnge.	R. R. Shops	
		2	Tap-Din.-Lnge.	R. R. Shops	
		12	Parlor	R. R. Shops	
		6	Cafe-Parlor	R. R. Shops	
		2	Bag-Dorm.	R. R. Shops	
		17	Mail-express	R. R. Shops	
		20	Baggage	R. R. Shops	
		2	Post Office	R. R. Shops	

serve as N. Y. C. directors. The C. & O. and Young-Bowman applications were reported in *Railway Age* of April 12, page 759. Both Roanoke and Princeton are served by the Virginian, which previously had been permitted to intervene, as reported in *Railway Age* of April 26, page 871.

Meanwhile, H. D. McGeorge, a preferred stockholder of the New York, Chicago & St. Louis, has asked the commission to require the C. & O. to divest itself of its Nickel Plate holdings. He said that in view of the proposed N. Y. C.-C. & O. relationship, the interest of the latter would be "sympathetic" to the interests of the N. Y. C., a direct competitor of the Nickel Plate. He added that the C. & O., through ownership of over 50 per cent of Nickel Plate common stock, dominates and controls that road by appointing its officers and determining its policies.

According to Mr. McGeorge, the Nickel Plate is considering a plan of recapitalization, which, he said, will be "greatly to the interest of the Chesapeake & Ohio." He also contended that the "transfer of the interest" of the C. & O. from the Nickel Plate to the N. Y. C. will result in diversion of traffic from the former to the latter, thereby causing "irreparable injury" to the Nickel Plate and having a "disastrous effect" on its earning power.

CENTRAL OF NEW JERSEY.—Plan of Reorganization.—The Interstate Commerce Commission has permitted the Reading, which owns approximately 57.5 per cent of the debtor's capital stock, and the State of New Jersey to intervene in the proceeding pertaining to the reorganization of this road. New Jersey, which has suggested modifications to the proposed reorganization plan filed by three bondholder groups, as outlined in *Railway Age* of April 26, page 871, also has filed an alternative plan. The state said that the C. of N. J. now owes it approximately \$16 million in taxes and interest thereon and objected to that phase of the plan submitted by the bondholder groups which suggested that it accept bonds bearing no interest in liquidation of its present claims against the road. Hearings on the reorganization opened this week before Examiner J. V. Walsh at the Washington, D. C., offices of the commission.

CHICAGO, ROCK ISLAND & PACIFIC.—Annual Report.—Operating revenues of this road last year totaled \$159,932,401, compared with \$192,046,910 in 1945. Operating expenses were \$122,866,118, compared with \$136,084,801. Net income was \$4,293,156, compared with \$7,983,190. Current assets at the end of the year were \$103,583,147, compared with \$118,659,624. Current liabilities were \$25,862,298, compared with \$51,016,283. Long term debt was \$304,597,678, compared with \$301,258,054.

CHICAGO, ROCK ISLAND & PACIFIC.—Reorganization Managers Approved.—Federal Judge Michael L. Igoe last week approved the appointment by this road's senior bondholders of four reorganization managers and named William E. Fay, president of the Champion Machinery Company, Joliet, Ill., as the court's choice for the fifth post. Judge Igoe's approval of the senior group's nominees was in

accordance with a mandamus writ issued on June 9 by the circuit court of appeals (see *Railway Age* of June 14, page 1215), directing that the reorganization plan be carried out without change. Judge Igoe's earlier attempt to appoint a majority of the managers led to the writ and to a petition for his removal from the case by the senior bondholders. This petition, however, was denied by the appeals court (see last week's *Railway Age*, page 1320).

Judge Igoe also dismissed the nomination by the convertible bondholders of Roy D. Keehn, a Chicago attorney, as one of the reorganization managers. The other managers are: Roy C. Ingersoll, president, Ingersoll Steel & Disc Division of Borg-Warner Corporation; Edward E. Brown, chairman, First National Bank of Chicago; Mark A. Brown, executive vice-president, Harris Trust & Savings Bank of Chicago; and Charles D. Wiman, president, Deere & Co.

CHICAGO, ROCK ISLAND & PACIFIC.—Acquisition.—This road has applied to the Interstate Commerce Commission for authority to acquire, through ownership of capital stock, and operate the Burlington, Muscatine & Northwestern. The applicant would pay \$60 per share for each of the 1,000 shares of capital stock. The B. M. & N. consists of 5.9 miles of track, used primarily for switching purposes, in Muscatine, Iowa.

COLORADO & SOUTHERN.—Annual Report.—Operating revenues of this road last year amounted to \$11,170,290, compared with \$15,527,982 in 1945. Operating expenses totaled \$9,711,275, compared with \$10,949,735. Fixed charges were \$614,857, compared with \$643,926. Net income was \$7,900 compared with \$1,803,801. Current assets at the end of the year were \$5,165,414, compared with \$6,631,758. Current liabilities were \$2,986,062, compared with \$4,327,764. Long term debt was \$41,540,836, compared with \$41,700,836.

DENVER & RIO GRANDE WESTERN-MISSOURI PACIFIC.—Trackage Rights.—These roads have jointly applied to the Interstate Commerce Commission for approval of a trackage rights agreement which would give each road use of certain tracks and terminal facilities of the other in Pueblo, Colo. The agreement, which would remain in effect for one year after July 1, includes approximately 7.2 miles of D. & R. G. W. track and 4.9 miles of M. P. track.

DES MOINES & CENTRAL IOWA.—Reorganization.—The Interstate Commerce Commission has assigned this road's reorganization proceedings for hearing on July 22 at its Washington, D. C., offices. Examiner Kirby will preside. The hearing will be held to receive evidence as to the reorganization plan filed May 14 by certain holders of the applicant's first mortgage bonds and "any other plans" that may be filed.

ERIE.—Trackage Rights.—This road has requested the Interstate Commerce Commission to issue an order requiring the Niagara Junction to permit it to continue to use certain main line tracks and terminal facilities and to fix just and reasonable

terms and compensation for their use. According to the Erie, it had been using these tracks free of charge from 1928 to May 8, when, it said, the latter sought compensation. The Erie said the two roads had been unable to reach an agreement as to what the compensation should be.

PENNSYLVANIA.—Equipment Trust Certificates.—This road has sold, subject to approval by the Interstate Commerce Commission, \$11,025,000 of Series S equipment trust certificates to Salomon Brothers & Hutzler on a bid of 99.079 for a 2½ per cent annual interest rate. Proceeds of the certificates will be applied toward the acquisition of equipment, as outlined in *Railway Age* of June 21, page 1284.

PENNSYLVANIA.—Stockholders' Committee.—The seven-man stockholders' committee, recently appointed by President M. W. Clement to be available to work with the road's management on labor and government matters which also concern the stockholders, held its first meeting with the management on June 4. Among the items discussed at the meeting were the Bulwinkle bill and the demands for increased wages recently filed by the organizations representing the non-operating employees. The committee also expressed an interest in ways and means of bringing about more harmony between the governmental decisions which increase railroad labor costs and the decisions of other bodies such as the Interstate Commerce Commission and the state public service commissions, which largely control the railroads' income. The members of the committee discussed at length the manner in which the stockholders might best assist the management in dealing with various aspects of this problem. The consensus was that the most effective opportunity open to the stockholders is to try to influence public and governmental opinion to perceive the justice and economic necessity of providing a reasonable return on investment. There was general agreement that in bringing this consideration to the attention of the public and the government the stockholders themselves have a direct responsibility and can be more effective in presenting their views directly to the press, the members of Congress and the regulatory bodies, than through an organized effort stimulated by management.

PULLMAN COMPANY.—New Officers.—Carroll R. Harding, since 1929 assistant to the president of the Southern Pacific at San Francisco, Cal., has been elected president of the Pullman Company, the sale of which by Pullman, Inc., to the buying group of 56 railroads was consummated on June 30 in Wilmington, Del. A three-judge federal court in Philadelphia, Pa., had approved a "closing agreement" of the sale on June 26. Charles H. Westbrook, comptroller of the Chicago & North Western since 1936, was elected vice-president and comptroller of the Pullman Company. G. A. Kelly and J. M. Carry were reelected vice-presidents.

SEABOARD AIR LINE.—Annual Report.—Operating revenues of this road in 1946 totaled \$112,403,393, compared with \$130,-

210,498 in the preceding year. Operating expenses amounted to \$92,707,509, compared with \$111,303,778. Fixed charges were \$14,618,482, compared with \$19,545,774. Net income was \$459,384, compared with a net deficit of \$10,472,058. Current assets at the end of the year were \$57,582,394, compared with \$60,866,695. Current liabilities were \$16,312,804, compared with \$18,207,552.

VERDE TUNNEL & SMELTER.—*Stock.*—Division 4 of the Interstate Commerce Commission has authorized this road to reduce from \$700,000 to \$140,000 the par value of its outstanding capital stock by changing from \$100 to \$20 the par value of each share. At the same time, the commission dismissed a request for authority to reduce the par value of authorized but unissued capital stock.

WHEELING & LAKE ERIE.—*Equipment Trust Certificates.*—Division 4 of the Interstate Commerce Commission has authorized this road to assume liability for \$2,940,000 of Series N equipment trust certificates, the proceeds of which will be applied toward the purchase of 1,000 hopper cars, as described in *Railway Age* of June 7, page 1191. The certificates will mature in 20 equal semi-annual installments, starting January 1, 1948. The report also approves a selling price of 99.1561 with a 1½ per cent interest rate, the bid of the Mellon National Bank & Trust Co. and its associate, on which basis the average annual cost will be approximately 1.67 per cent.

Average Prices Stocks and Bonds

	July 1	Last week	Last year
Average price of 20 representative railway stocks..	46.70	45.46	64.74
Average price of 20 representative railway bonds..	88.27	88.20	99.00

Dividends Declared

Atchison, Topeka & Santa Fe.—\$1.50, payable September 2 to holders of record July 25.
 Carolina, Clinchfield & Ohio.—\$1.25, quarterly, payable July 21 to holders of record July 10.
 Illinois Terminal.—18c, quarterly, payable August 1 to holders of record July 10.
 International of Central America.—5% preferred (accum.), \$1.25, payable July 15 to holders of record July 7.
 Joliet & Chicago.—com. stamped, \$1.75, payable July 7 to holders of record July 2.
 Minneapolis & St. Louis.—25c, payable August 1 to holders of record July 15.
 Norfolk & Western.—common, \$2.50, quarterly, payable September 10 to holders of record August 13; adjustment preferred, \$1.00, quarterly, payable August 8 to holders of record July 16.
 Piedmont & Northern.—50c, quarterly; extra, \$1.00, both payable July 21 to holders of record July 5.
 Pittsburgh, Cincinnati, Chicago & St. Louis.—50c, semi-annually, payable July 19 to holders of record July 10.
 Reading.—25c, quarterly, payable August 14 to holders of record July 17.
 Richmond, Fredericksburg & Potomac.—Non-voting com. \$3.00, semi-annually; dividend obligation, \$3.00, semi-annually, both payable June 30 to holders of record June 24.
 Schuylkill Valley Navigation.—\$1.25, semi-annually, payable July 10 to holders of record June 27.

Organizations

R. L. Williams, president of the Chicago & North Western, will address the 79th regular meeting of the **Mid-West Shippers Advisory Board** on July 10 at the Schroeder Hotel in Milwaukee, Wis.

Abandonments

ATCHISON, TOPEKA & SANTA FE.—Division 4 of the Interstate Commerce Commission has authorized this road to abandon approximately 10.3 miles of its Portland, Colo.—Canon City line and a 0.9-mile portion of its so-called Rockvale branch at Clelland, Colo., as service is to be provided under trackage rights over the Denver & Rio Grande Western.

CHICAGO & NORTH WESTERN.—Division 4 of the Interstate Commerce Commission has authorized this road to abandon its line from Parrish Junction, Wisc., to Harrison, 6.2 miles.

CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC.—This road has applied to the Interstate Commerce Commission for authority to abandon its line from Junction Switch, Ia., to Worthington, 9.9 miles.

CHICAGO GREAT WESTERN.—Division 4 of the Interstate Commerce Commission has authorized this road to abandon a 3.9-mile track between Sycamore, Ill., and DeKalb, and to construct a 365-ft. connecting track between its own line in Sycamore with the Chicago & North Western. The applicant has been authorized to operate under a trackage rights agreement with the C. & N. W. between Sycamore and DeKalb. (See *Railway Age* of February 22, page 430.)

GREEN BAY & WESTERN.—Because this road has assured the Waupaca, Wisc., Association of Commerce and other protestors that it will continue operation of terminal facilities at Waupaca, Division 4 of the Interstate Commerce Commission has set aside an order of April 17, which, in turn, had vacated and set aside an order of February 28 authorizing this road to abandon a 9.7 mile branch from Scandinavia, Wisc., to Waupaca. (See *Railway Age* of April 26, page 873, and March 15, page 576.)

PETALUMA & SANTA ROSA.—Division 4 of the Interstate Commerce Commission has authorized this road to abandon its line from a point near Leddy, Cal., to a point near Santa Rosa, 2.6 miles.

TEXAS & PACIFIC.—Division 4 of the Interstate Commerce Commission has authorized this road to abandon a line from Church Point, La., to Crowley, 20 miles.

TREMONT & GULF.—This road has applied to the Interstate Commerce Commission for authority to abandon its line from Grandstaff, La., to Waggoner, 3.2 miles.

UNION PACIFIC.—This company and its lessor, the Oregon Short Line, have applied to the Interstate Commerce Commission for authority to abandon, including operation by the former, a line from Bakers, Utah, to Urban, 5 miles.

UTAH-IDAHO CENTRAL.—Division 4 of the Interstate Commerce Commission has authorized S. J. Quinney, receiver of the road, to abandon the entire line, extending 94.7 miles from Ogden, Utah, to Preston,

Idaho, including the Plain City branch from Harrisville, Utah, to Warren, 8 miles, and the Quinney branch from Lewiston to Thain, approximately 12 miles. The commission's order noted that territory tributary to the line is provided with hard-surfaced highways and is served by the Union Pacific and motor carriers. "Aside from . . . operating losses, the line is in need of rehabilitation, for which large expenditures will be required," the commission said. "Its abandonment might inconvenience or damage some shippers and require others to incur additional charges for trucking transportation or expend substantial sums of money for the construction or rearrangement of industrial tracks or sidings, but continued operation at financial losses would impose an undue burden upon the applicant and upon interstate commerce."

WOOD RIVER BRANCH.—This road has applied to the Interstate Commerce Commission for authority to abandon its entire 6-mile line between Hope Valley, R. I., and Wood River Junction.

Overseas

GERMANY.—The transportation situation at the Port of Bremen has returned to normal and rail lines there are now capable of handling all traffic assigned to them, according to the War Department's latest report on transportation in the United States Zone of Occupation in Germany. The report also disclosed that the United States Army Transportation Corps on May 1 relinquished operational control of all German military passenger train services and facilities and also discontinued passenger rail transportation offices. Full responsibility for these functions, according to the report have been assumed by the Reichsbahn and its subsidiary organizations, Deutsches Reisebureau (ticket agency), and Mitropa (sleeping and dining car services). The Transport Division of the military government, however, maintains general supervision and control over the Reichsbahn.

UNION OF SOUTH AFRICA.—This country's program to spend £35,000,000 for new locomotives and passenger and freight cars involves the expenditure of £8,600,000 in the fiscal year ending on March 31, 1948, according to a recent issue of the Foreign Commerce Weekly of the Department of Commerce.

GREAT BRITAIN.—The British government estimates it lost £11,887,000 during 1946 from the four main-line railroads and the London Passenger Transport Board, according to a report from the American embassy in London which appeared in a recent issue of the Foreign Commerce Weekly. The net revenue of the railway pool in 1946 is estimated at £32,182,000, compared with the guaranteed rental of £43,469,000 paid each year by the government since the war began. This is the first time the government has been on the debit side through the wartime pooling scheme which is still in force and which will continue until nationalization.

MORE POWER

This curve shows a comparison of horsepower at rear of tender for a modern locomotive when equipped with piston valves and when equipped with the Franklin System of Steam Distribution. In both cases, steam consumption by the engine is 90,000 lbs. per hour.

Computations based on:

Type 4-8-4

Cylinders 25" x 32"

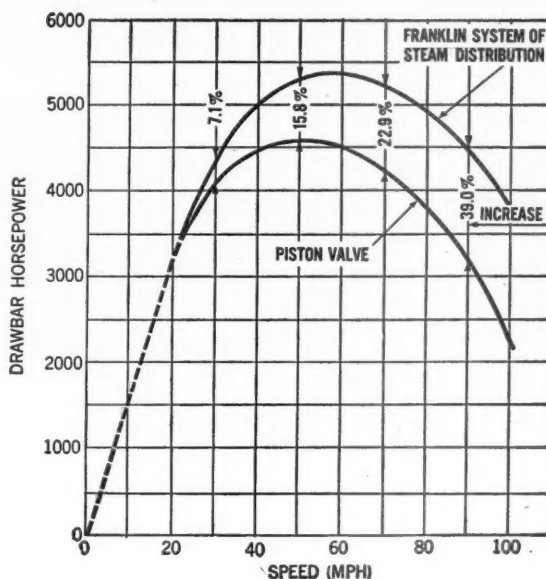
Driving Wheels 80"

Boiler Pressure 300 lb

Steam Temperature 730° F

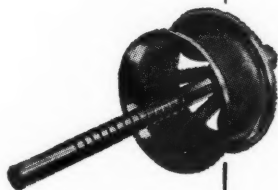
Total Heating Surface 4225 sq ft

Grate Area 100.2 sq ft



from a locomotive equipped with the Franklin System of Steam Distribution

This curve shows the improvement in horsepower output that may be expected from a modern locomotive when it is equipped with the Franklin System of Steam Distribution.

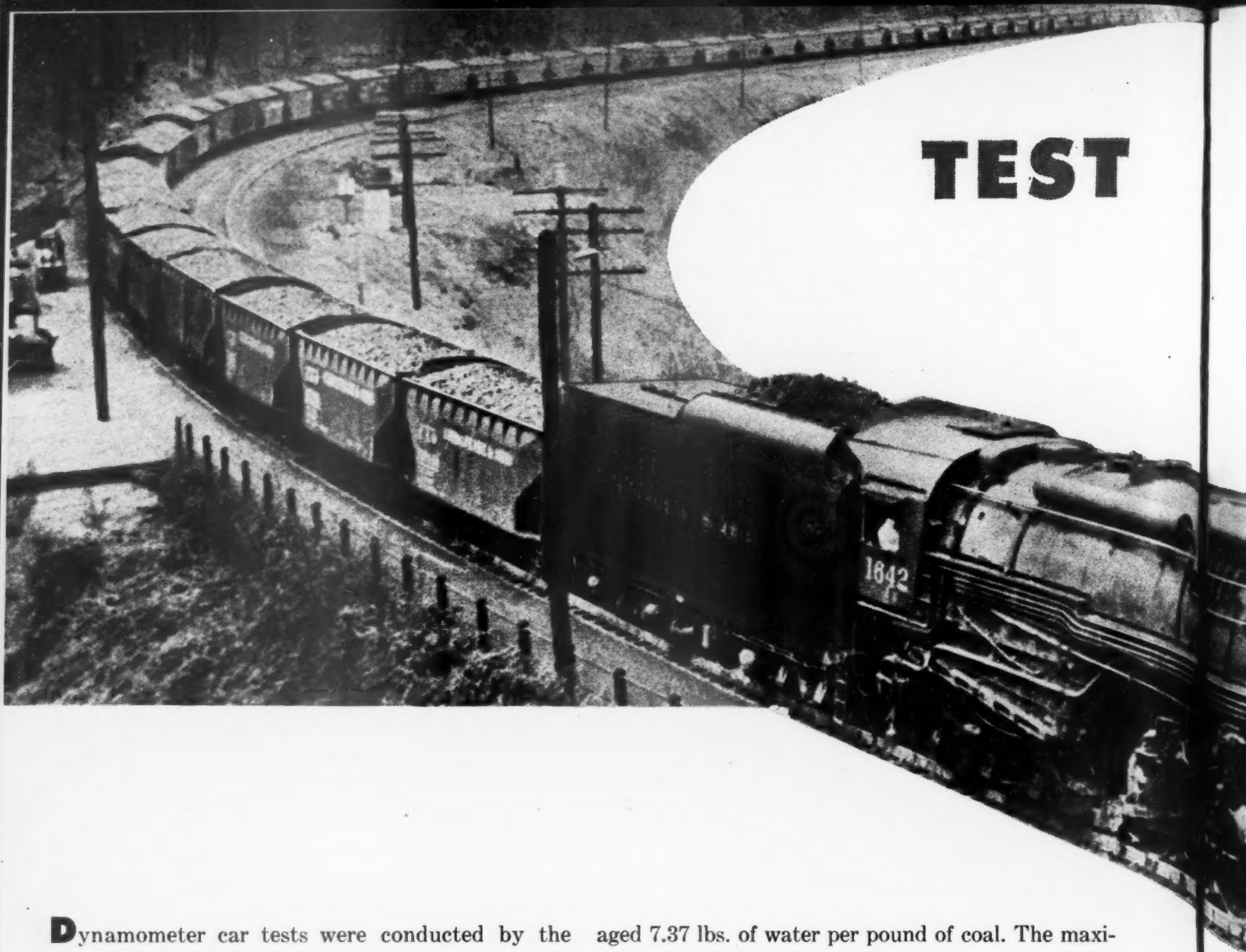


FRANKLIN RAILWAY SUPPLY COMPANY, INC.

NEW YORK • CHICAGO • MONTREAL

STEAM DISTRIBUTION SYSTEM • BOOSTER • RADIAL BUFFER • COMPENSATOR AND SNUBBER • POWER REVERSE GEARS
AUTOMATIC FIRE DOORS • DRIVING BOX LUBRICATORS • STEAM GRATE SHAKERS • FLEXIBLE JOINTS • CAR CONNECTION

July 5, 1947



Dynamometer car tests were conducted by the Chesapeake and Ohio Railway Company, with one of these locomotives on both the Alleghany Sub-Division between Clifton Forge, Va. and Hinton, W. Va., and on the Northern Sub-Division between Russell, Ky. and Columbus, Ohio.

During the test the amount of steam furnished by the boiler was never a limiting factor in the amount of tonnage hauled, as the locomotive was a free steamer under all conditions. The evaporating aver-

aged 7.37 lbs. of water per pound of coal. The maximum evaporation was 8.24 lbs.

• • •

Inspection of the final results of all the test trips showed the locomotive frequently developed a sustained drawbar horse power of 6,700 — 6,900 at speeds of 42 and 46 miles per hour with a back pressure of approximately 20 lbs. The highest instantaneous drawbar horse power (7,498) was developed at a speed of 46 miles per hour.

ALLEGHANY SUB-DIVISION TESTS

Place: Clifton Forge, Va. — Hinton, W. Va.

Grade: Principal grade + 1.14% for a distance of approximately ten miles with an additional mile of grades varying from + 1.00 to 1.38%. Ruling grade Eastbound covers a distance of 12½ miles of which 7½ miles has a + grade of .57% and the remaining 5½ miles, a + grade of .56%.

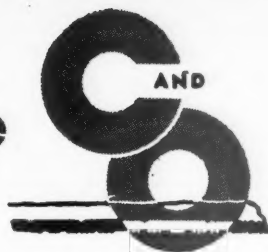
Coal Consumption: Coal per 1,000 gross ton miles for 7 loaded trips averaged 77.11 lbs. The maximum for a train was 93.05 and the minimum was 70.70 lbs.

Water Consumption: Water per drawbar horse power hour for 7 loaded trains averaged 23.76 lbs. The maximum for a train was 24.73 and the minimum 22.31 lbs.

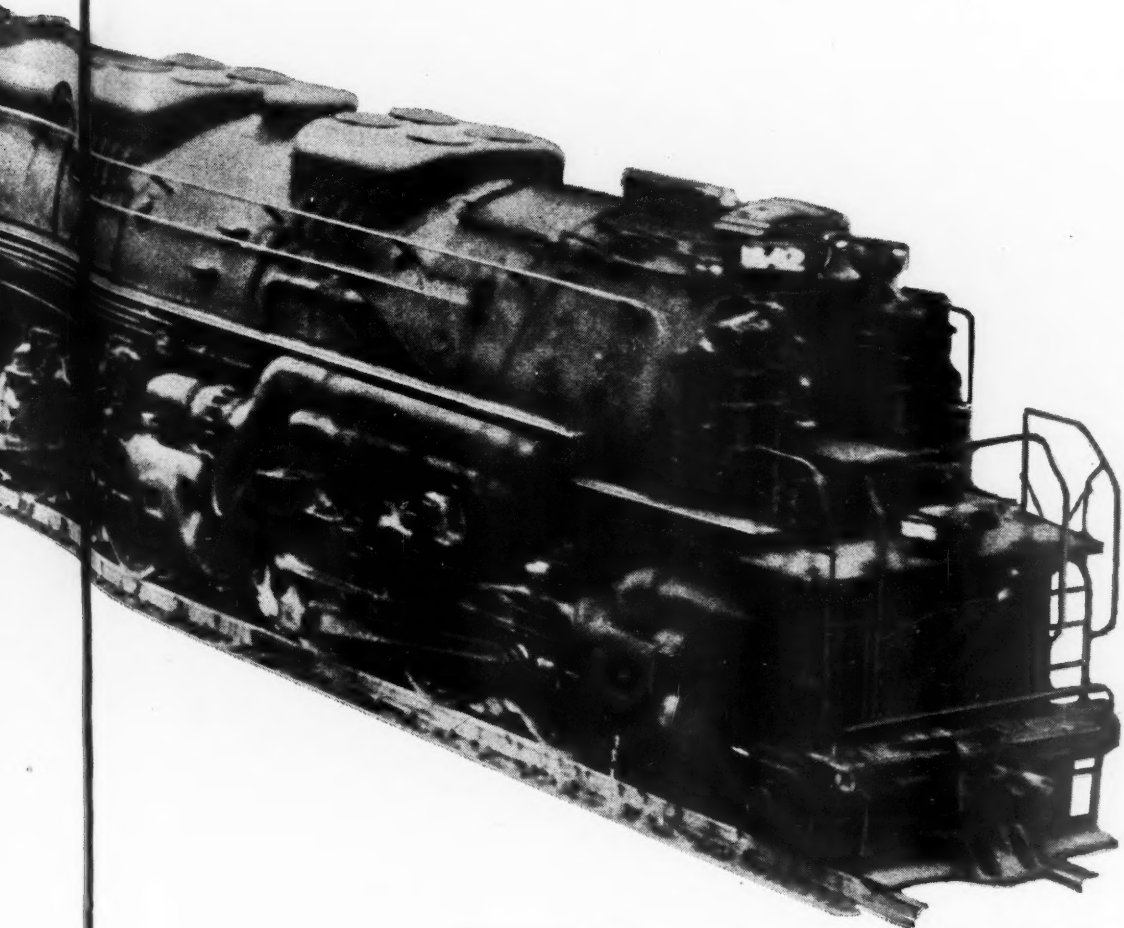


LIMA LOCOMOTIVE WORKS,

RESULTS on the



Lima-built Class H-8 Locomotive Type 2-6-6-6



NORTHERN SUB-DIVISION TESTS

Place: Russell, Ky. — Columbus, Ohio

Grade: Principal grade between Russell, Ky. and Columbus, Ohio extends for a distance of $17\frac{1}{4}$ miles of which $1\frac{1}{4}$ miles has a grade of $+ .7\%$, with the remainder varying from $.0$ to $+ .20\%$.

Coal Consumption: Coal per 1,000 gross ton miles for 4 loaded trips averaged 40.68 lbs. The maximum for a train was 49.58 and the minimum 31.93 lbs.

Water Consumption: Water per drawbar horse power hour for 4 loaded trips averaged 23.12 lbs. The maximum for a train was 25.95 and the minimum 20.77 lbs.

Acceleration: A test stop was made with a train consisting of 160 loads (14,083 tons). The locomotive started the train with a maximum drawbar pull of 117,500 lbs. and 6 minutes later had moved the train one mile, the speed accelerating to 19 mph. A speed of 29 mph was reached 11 minutes after starting.

INCORPORATED

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LIMA, OHIO

Railway Officers

EXECUTIVE

W. G. Strohm, general traffic manager of the Litchfield & Madison, at St. Louis, Mo., has been elected vice-president in charge of traffic, with the same headquarters, succeeding **J. M. Duncan**, who has resigned.

J. V. B. Duer, assistant to vice-president—operation of the Pennsylvania, with headquarters at Philadelphia, Pa., has retired after 41 years of railroad service. Throughout his career Mr. Duer has been closely associated with the various electrification projects of the Pennsylvania system. He played a prominent part in supervising the electrification of the railroad's eastern seaboard lines between New York, Philadelphia, Pa.; Baltimore, Md.; Washington, D. C., and Harrisburg, Pa., his work in this connection involving not only roadway construction but also design and construction of the electric locomotives. Mr. Duer was born at Poultney, Vt., in 1882, and was graduated from the Stevens Institute of Technology in 1903 with the degree of mechanical engineer. He thereupon entered the apprenticeship course of the General Electric Company at Lynn, Mass., and Schenectady, N. Y., where he specialized in railway work. In 1905, while the electrification of the Long Island was under way, he entered the employ of the engineering firm which was supervising the project, serving as inspector. The following year, Mr. Duer transferred to the railroad's service in a similar capacity. In 1910, he was appointed a foreman of motormen by the Pennsylvania in connection with the preparation for, and inauguration of, the road's passenger service into Pennsylvania Station, New York, via the Hudson River tubes. Three years later, Mr. Duer was promoted to assistant engineer in charge of electrical work under the mechanical engineer of the Pennsylvania lines east of Pittsburgh, Pa. In 1919 he was appointed electrical engineer for the eastern lines. In 1920 he became a member of the staff of the chief of motive power, with the same title, and his duties were extended to cover the entire system. In 1935 he was promoted to chief electrical engineer and in 1941 he became assistant to vice-president—operation, the position he held until his retirement.

FINANCIAL, LEGAL AND ACCOUNTING

W. C. Johnson, freight claim agent of the Chicago & North Western at Chicago, has retired after 48 years of service.

J. C. Manson, freight claim agent of the Canadian Pacific at Winnipeg, Man., has been transferred to Calgary, Alta., succeeding **D. Palmer**, who has been transferred to Vancouver, B. C., where he replaces **George Jeffries**, who has retired. **G. P. Connolly**, head clerk of the de-

partment at Toronto, Ont., succeeds Mr. Manson at Winnipeg.

Robert W. Wolfe has been appointed assistant Wisconsin attorney of the Chicago & North Western, at Milwaukee, Wis. **John L. Davidson, Jr.**, and **Robert C. Begnelin** have been appointed attorneys at Chicago. **N. Y. Fowler**, attorney at Chicago, has retired.

F. H. Hitchcock, assistant general claim agent of the Atchison, Topeka & Santa Fe at Los Angeles, Cal., has been appointed general claim agent, with the same headquarters, succeeding **Robert Irwin**, who has retired after 43 years of service. **O. F. Gray**, chief claim adjuster at Los Angeles, has been promoted to assistant general claim agent there, succeeding Mr. Hitchcock. **P. W. McCown**, claim adjuster, has been promoted to chief claim adjuster, with headquarters as before at Los Angeles, succeeding Mr. Gray.

T. E. Adamson, assistant freight claim agent of the Chicago & North Western, has been promoted to freight claim agent at Chicago, succeeding **W. C. Johnson**, who has retired. **A. C. Mundy** succeeds Mr. Adamson as assistant freight claim agent at Chicago. **F. C. Beutel**, chief clerk of the freight claim department, has been appointed assistant freight claim agent, at Chicago.

OPERATING

J. W. Mode, superintendent of the Amarillo division of the Fort Worth & Denver City and the Wichita Valley (both parts of the Burlington system), with headquarters at Amarillo, Tex., has retired after more than 46 years of service. The jurisdiction of **W. O. Frame**, superintendent of the Wichita Falls division, has been extended to include the Amarillo division, with headquarters at Wichita Falls, Tex. **M. G. Monaghan** has been appointed assistant superintendent, with headquarters at Amarillo.

W. W. Gibbs has been appointed superintendent of the Columbus & Greenville, and **I. H. Atkins** has been appointed assistant superintendent and trainmaster, both with headquarters at Columbus, Miss.

W. L. Mueller, superintendent of the Dakota division of the Chicago & North Western, at Huron, S. D., has been appointed general manager of the Western district, with headquarters at Omaha, Neb., succeeding **C. E. Sainsbury**, who has retired. **M. J. Williams**, joint superintendent of the Ashland division at Ironwood, Mich., succeeds Mr. Mueller as superintendent at Huron. **F. L. Houx**, assistant superintendent, Chicago freight terminals, at Proviso, Ill., has been appointed joint superintendent of the Ashland division at Ironwood, succeeding Mr. Williams. **J. F. Sainsbury**, assistant superintendent at Green Bay, Wis., has been appointed superintendent of the Lake Shore division, with the same headquarters, succeeding **C. J. Larkin**, who has retired. **H. A. Westberg**, superintendent of the Northern Iowa division at Mason City, Iowa, has been transferred to the Ashland

division, with headquarters at Antigo, Wis., where he replaces **D. B. McIntyre**, who has retired. **J. H. Kline**, assistant superintendent of the Galena division, at Chicago, has been appointed superintendent of the Northern Iowa division, at Mason City, succeeding Mr. Westberg. **A. T. Peagan**, trainmaster at Sioux City, Iowa, has been appointed assistant superintendent of the Lake Shore division, with headquarters at Green Bay, succeeding Mr. J. F. Sainsbury. **J. C. Fullmer**, trainmaster at Council Bluffs, Iowa, has been appointed assistant superintendent of the Galena division at Chicago, succeeding Mr. Kline. **C. J. Moore**, trainmaster at Clinton, Iowa, has been appointed assistant superintendent, Chicago freight terminals, at Proviso, succeeding Mr. Houx. **E. A. Koehler**, assistant trainmaster at Chicago, has been appointed trainmaster, Chicago freight terminals, 40th Street, Chicago, succeeding **G. L. Thorpe**, who has retired. **R. A. Reich**, assistant trainmaster at the Chicago freight terminals, 40th Street, Chicago, has been appointed trainmaster. **V. D. Flynn**, trainmaster, Galena division, at South Pekin, Ill., has been transferred to the Iowa division, at Clinton, Iowa, replacing Mr. Moore. **L. M. Shaw**, trainmaster, Nebraska division, at Fremont, Neb., has been transferred to the Iowa division, at Council Bluffs, Iowa, succeeding Mr. Fullmer. **W. J. Hennigan**, assistant trainmaster, Iowa division, at Clinton, has been appointed trainmaster, Iowa division, at Sioux City, replacing Mr. Peagan. **A. L. Eckles**, trainmaster, Dakota division, at Tracey, Minn., has been transferred to the Madison division, at Madison, succeeding **E. P. Wright**, who has retired. **H. R. Beisel**, road foreman of engines at Boone, Iowa, has been appointed trainmaster—road foreman of engines, Galena division, at South Pekin, replacing Mr. Flynn.

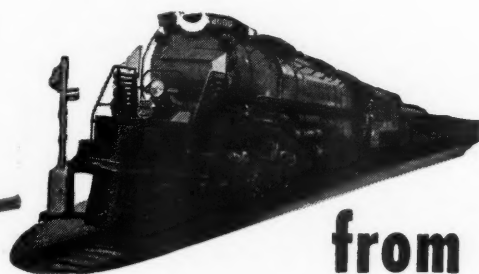
C. H. Grant, superintendent of transportation of the Southern Pacific at San Francisco, Cal., has been appointed general superintendent of transportation, with jurisdiction over the company's lines in six western states. Mr. Grant entered the serv-



C. H. Grant

ice of the Southern Pacific in 1921, as a train dispatcher at Portland, Ore., after experience as a telegrapher and train dispatcher on other roads, and as trainmaster

Get every pound of POWER



from those hot gases

● The installation of Security Circulators in a locomotive boiler provides a large additional heating area in the path of the hot gases.

This enables the locomotive to get up steam more speedily; increases the rapidity of water circulation from the side legs over the crown sheet; and aids in maintaining maximum boiler output

Circulator-equipped locomotives are now in operation on forty-six different railroads.

AMERICAN ARCH COMPANY, INC.

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SECURITY CIRCULATOR DIVISION

and supervisor of transportation with the A. E. F. in Siberia during World War I. He advanced through various operating positions until 1942, when he was appointed assistant superintendent, in which capacity he served on the Portland and Salt Lake divisions.

F. G. Love, manager property protection and safety of the New York Central at New York, has been appointed manager property protection and freight claim departments at New York, reporting to the executive vice-president. The safety department, heretofore under the jurisdiction of Mr. Love, has been transferred to the personnel and public relations department, and the superintendent of safety will report to the vice-president of personnel and public relations.

TRAFFIC

W. S. McNair, general agent of the Chesapeake & Ohio at Chicago, has retired after 54 years of service with this road.

M. Kinyon has been appointed general agent of the Atchison, Topeka & Santa Fe, with headquarters at Salt Lake City, Utah, succeeding **G. N. Ofield**, deceased.

Nels Kinell, assistant passenger traffic manager of the Southern Pacific at Los Angeles, Cal., has retired after 46 years of service.

T. L. Darneal, general agent of the Missouri-Kansas-Texas at Cincinnati, Ohio, has been appointed to the newly created position of general freight and passenger agent, with headquarters at San Antonio, Tex. **J. F. Dolard**, assistant general freight and passenger agent at San Antonio, has been appointed special representative, with the same headquarters.

L. J. Kidd, general agent, freight department, of the Chicago, Milwaukee, St. Paul & Pacific at Seattle, Wash., has been appointed assistant to the western traffic manager, with the same headquarters, succeeding **J. O. McIlyar**, promoted to assistant to the vice-president at Chicago.

I. I. Norris, district freight and passenger agent of the Southern, has been appointed general agent, freight and passenger departments, with headquarters as before at Rochester, N. Y.

E. L. Pardee, passenger traffic manager of the Chicago & North Western, at Chicago, has retired after more than 50 years of railroad service. **R. C. Kerr**, freight traffic manager in charge of industrial development, at Chicago, has retired. **D. R. Hickok**, manager of the mail, baggage and express department, at Chicago, has retired. **H. B. Spangler**, chief of the tariff bureau, at Chicago, has retired.

A. B. Smith, assistant traffic manager of the Litchfield & Madison, at Chicago, has been promoted to general traffic manager, with the same headquarters, succeeding **W. G. Strohm**, whose election to vice-president in charge of traffic is reported elsewhere in these columns.

F. C. Cowherd has been appointed assistant general passenger agent of the

Louisville & Nashville at Louisville, Ky., succeeding **C. J. Lieber**, who has retired after nearly 55 years of continuous service with the road. **T. M. Strane**, traveling passenger agent at Chicago, has been appointed general agent, passenger department, at Chicago, succeeding Mr. Cowherd.

C. J. Harbeke, assistant traffic manager of the Denver & Rio Grande Western, at San Francisco, Cal., has been appointed western traffic manager, with the same headquarters, succeeding **J. E. Courtney**, who has retired after 46 years of service. **A. A. Bolton**, general agent, freight department, at San Francisco, has been appointed assistant freight traffic manager at San Francisco. **J. M. Jensen** has been appointed assistant traffic manager at Pueblo, Colo. The position of general agent at Pueblo has been abolished. **J. K. Speight** has been appointed general agent at San Francisco.

H. C. Duvall, general passenger agent of the Chicago & North Western at Chicago, has been promoted to passenger traffic manager at Chicago, succeeding **E. L. Pardee**, who has retired. **J. R. Brennan**, assistant to the passenger traffic manager at Chicago, has been promoted to assistant traffic manager at Chicago. **N. H. Jones**, assistant general passenger agent, has been promoted to general passenger agent, at Chicago. **C. E. Quackenbush**, chief clerk of the passenger department, has been promoted to assistant general passenger agent at Chicago. **C. E. Case**, general industrial agent, has been promoted to director of industrial development at Chicago, succeeding **R. C. Kerr**, retired. **A. O. Olson**, assistant freight traffic manager—sales, has been appointed general industrial agent. **G. M. Bruere**, public relations representative at Omaha, Neb., has been appointed industrial agent at Chicago.

J. C. Ostrom, assistant passenger traffic manager of the Chesapeake & Ohio at Richmond, Va., has been promoted to passenger traffic manager, with the same headquarters, succeeding **T. H. Gurney**, who has retired after nearly 44 years of service with that road. A photograph of Mr. Ostrom and a sketch of his career were published in the *Railway Age* of April 19, page 827, in connection with his appointment at that time as assistant passenger traffic manager. **W. E. Turner**, assistant general eastern passenger agent at New York, has been appointed assistant passenger traffic manager at Richmond. **Ralph C. Stewart**, district passenger agent of the Missouri-Kansas-Texas at New York, has been appointed district passenger agent of the Chesapeake & Ohio at New York.

Hugh Kendall, city passenger agent of the Missouri-Kansas-Texas at Austin, Tex., has been promoted to general eastern passenger agent, with headquarters at New York. **Paul Garnatz**, city passenger agent at New York, has been promoted to district passenger agent there. Mr. Kendall joined the Missouri-Kansas-Texas as accountant and chief clerk in the passenger traffic department at San Antonio, Tex., in February, 1936, and since that time has

advanced through various positions in San Antonio, Dallas, and Austin.

E. J. Merkel, general western freight agent of the Norfolk & Western at Chicago, has been appointed general freight agent at Columbus, Ohio, succeeding **Henry D. Wilkerson**, assistant freight traffic manager, who is retiring after more than 47 years of service with that road. **Edwin F. Stone**, general agent at Jacksonville, Fla., has been advanced to general western freight agent at Chicago, succeeding Mr. Merkel. **N. R. Lehmann**, general coal freight agent at Roanoke, Va., has been appointed assistant freight traffic manager, with the same headquarters, a newly-created position. **Fred E. Willman**, coal freight agent at Roanoke, has been promoted to general coal freight agent. **F. B. Wright**, assistant general freight agent at Roanoke, succeeds Mr. Willman as coal freight agent at Roanoke. **C. H. Pernter**, assistant general freight agent at Roanoke, has been appointed assistant freight traffic manager, a new position.

ENGINEERING & SIGNALING

W. H. Chapman, electrical engineer of the Chicago & North Western at Chicago, has been promoted to chief electrical engineer, with the same headquarters, succeeding **J. A. Andreucetti**, who has retired.

G. Harrison, resident engineer of the Canadian National, with headquarters at Winnipeg, Man., has retired.

Carl R. Bergman, whose appointment as engineer maintenance of way of the Western Pennsylvania division of the Pennsylvania at Pittsburgh, Pa., was reported in the *Railway Age* of June 7, was born at Warren, Pa., and was graduated from Pennsylvania State College in 1928. While still a student in 1927, he entered the service of the Pennsylvania as an assistant on the engineer corps at Philadelphia, Pa. After completing his education he was transferred in that capacity to New York. Mr. Bergman was promoted to assistant supervisor of track in November, 1928,



Carl R. Bergman

and served in this capacity at several points, until he was appointed supervisor of track in 1933. In 1943 he was appointed assistant division engineer of the Maryland division and in May, 1944, he was pro-

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BENTONVILLE

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84.8 Miles

ROANOKE

UNION SWITCH & SIGNAL COMPANY

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NEW YORK

CHICAGO



ST. LOUIS

SAN FRANCISCO

moted to division engineer of the Renovo division at Erie, Pa. In December, 1944, Mr. Bergman was transferred to the Chicago Terminal division at Chicago, where he served until his recent appointment as engineer maintenance of way at Pittsburgh.

A. L. Bartlett, engineer maintenance of way of the New York, New Haven & Hartford at New Haven, Conn., has been appointed assistant to chief engineer, with the same headquarters. **A. A. Cross**, general assistant engineer, has been appointed engineer maintenance of way, with headquarters as before at New Haven.

C. W. Reeve, bridge and building supervisor of the Delaware & Hudson at Oneonta, N. Y., has been appointed engineer of track at Albany, N. Y., succeeding **C. E. R. Haight**, who has been appointed division engineer at Plattsburg, N. Y., to succeed **W. J. H. Manning**, retired.

R. E. Tew, senior assistant division engineer of the Seaboard Air Line at Savannah, Ga., has been promoted to division engineer, with headquarters at Americus, Ga.

R. W. Mauer, assistant engineer in charge of the engineering drafting room of the Atchison, Topeka & Santa Fe at Chicago, has been promoted to assistant engineer in the office of the chief engineer, system, with the same headquarters, succeeding **R. L. Cochrane**, who has retired.

A. R. Harris, assistant engineer of bridges of the Chicago & North Western, at Chicago, has been promoted to engineer of bridges, with the same headquarters, succeeding **A. E. Bechtelheimer**, who has retired. **W. L. Anderson**, assistant general bridge inspector at Chicago, has been promoted to assistant engineer of bridges, with the same headquarters, succeeding Mr. Harris. **P. V. Thelander**, division engineer, Galena division, at Chicago, has been promoted to assistant engineer of maintenance, with the same headquarters, succeeding **F. W. Hilman**, who has retired. **H. W. Jensen**, office engineer in the chief engineer's office at Chicago, has been appointed division engineer, Galena division, at Chicago, succeeding Mr. Thelander. **F. W. Creedle**, division engineer, Lake Shore division, at Green Bay, Wis., has been transferred to the Wisconsin division, with headquarters at Chicago, succeeding **C. H. Perry**, who has retired. **L. C. Smith**, division engineer, Peninsula division, at Escanaba, Mich., has been transferred to the Madison division, with headquarters at Madison, Wis., succeeding **R. W. Richardson**, who has retired. **J. P. Datesman**, division engineer, Dakota division, at Huron, S. D., has been transferred to the Lake Shore division, with headquarters at Green Bay, succeeding Mr. Creedle. **W. H. Huffman**, division engineer, Western division, of the Chicago, St. Paul, Minneapolis & Omaha (part of the North Western system) at St. Paul, Minn., has been transferred to the Peninsula division, with headquarters at Escanaba, succeeding Mr. Smith. **H. H. Hall**, assistant engineer, Madison division, at Madison, Wis., has been promoted to division engineer, Western division of the C.

St. P. M. & O., with headquarters at St. Paul, succeeding Mr. Huffman. **J. W. Johnson**, assistant engineer, Dakota division, at Huron, S. D., has been promoted to division engineer on the same division, with the same headquarters, succeeding Mr. Datesman. **M. S. Reid**, roadmaster, Iowa division, at Ames, Iowa, has been promoted to principal assistant engineer, chief engineer's office, at Chicago, succeeding **G. A. Saint**, who has retired. **J. L. Perrier**, assistant engineer, Iowa division, at Boone, Iowa, has been promoted to office engineer, chief engineer's office, at Chicago, succeeding Mr. Jensen. **R. D. Culbertson**, instrumentman, Lake Shore division, at Green Bay, Wis., has been promoted to assistant engineer, Madison division, with headquarters at Madison, Wis., succeeding Mr. Hall. **A. B. Zabrowski**, instrumentman, Wisconsin division, at Chicago, has been promoted to assistant engineer, Dakota division, at Huron, S. D., succeeding Mr. Johnson. **H. F. Braden**, instrumentman, Galena division, at Chicago, has been promoted to assistant engineer, Iowa division, at Boone, Iowa, succeeding Mr. Perrier. **J. F. Shanklin**, instrumentmen, Galena division, at Chicago, has been promoted to assistant general bridge inspector, at Chicago, succeeding Mr. Anderson.

MECHANICAL

G. H. Warning, master mechanic of the Canadian National, with headquarters at Regina, Sask., has retired.

W. W. Bates, assistant to the superintendent of motive power of the Chicago, Milwaukee, St. Paul & Pacific at Milwaukee, Wis., has been appointed assistant superintendent of motive power in charge of Diesel operation, with the same headquarters, succeeding **W. C. Marshall**, who has been relieved of these duties at his own request. Mr. Marshall becomes assistant to the superintendent of motive power, at Milwaukee, succeeding Mr. Bates. **W. Bennett** has been appointed general car foreman at Galewood, Ill.

F. L. Hoffman, assistant master mechanic of the New York Central at Buffalo, N. Y., has been promoted to master mechanic, with the same headquarters, succeeding **W. C. Wardwell**, who has been transferred to Albany, N. Y. **M. W. McMahon**, assistant superintendent shops of the Cleveland, Cincinnati, Chicago & St. Louis at Beech Grove, Ind., has been appointed assistant master mechanic of the New York Central at Buffalo.

Owen Rupert Barefoot, assistant superintendent motive power of the Eastern lines of the Canadian Pacific at Toronto, Ont., has been promoted to superintendent motive power and car department, Eastern lines, with the same headquarters, succeeding **J. D. Muir**, who has retired under the pension rules of the company. **P. J. Johnson**, district master mechanic at Montreal, Que., has been appointed assistant superintendent motive power, Eastern lines, at Toronto. **L. N. Winslade**, division master mechanic at Montreal, has been appointed district master mechanic to succeed Mr. Johnson. Mr. Barefoot was born at High Wycombe, Buckinghamshire, Eng-

land, and was educated in the public and high schools of Montreal, Que. He entered railroad service in 1909 as machinist apprentice in the Canadian Pacific Angus shops. During World War I, he saw active service overseas with the 60th battalion from July, 1915, to April, 1919. Mr. Barefoot served as mechanical draftsman for the Canadian Pacific at Montreal,



Owen Rupert Barefoot

from June, 1919, to August, 1927, when he became machine shop foreman at North Bay, Ont. He was appointed night locomotive foreman at North Bay in August, 1928, subsequently being transferred to Lambton and Toronto. From June, 1936, to April, 1938, he was division master mechanic of the Schreiber division, becoming general foreman at McAdam Junction on the latter date. Mr. Barefoot became division master mechanic of the Bruce division in November, 1939; acting master mechanic of the Algoma district in February, 1942; and division master mechanic at Toronto in August, 1942. He was appointed assistant superintendent motive power at Toronto on September 1, 1945, which position he held until his recent promotion.

Mr. Muir entered railroad service in 1905 as a machinist with the Canadian Pacific at Moose Jaw, Sask., and four years later he became shop foreman there, subsequently transferring to Calgary, Alta. From 1910 to 1916 he served as locomotive foreman successively at Calgary, Medicine Hat, Alta., and Winnipeg, Man. In 1917 Mr. Muir was appointed general foreman, motive power department at Vancouver, B. C., and two years later he became assistant works manager at the Angus shops at Montreal. Mr. Muir was appointed assistant superintendent motive power and car department of the Western lines at Winnipeg in 1928, which position he held until October, 1937, except for a time in 1933 when he served as acting superintendent motive power and car department of the Eastern lines. Mr. Muir was appointed superintendent motive power and car department of the Eastern lines at Toronto in October, 1937, which position he held until his retirement.

OBITUARY

Dr. G. H. Curfman, chief surgeon of the Denver & Rio Grande Western at Denver, Colo., died in that city on June 24.

INFORMATION

ARRIVING TRAINS

TRAIN	FROM	DUE TO ARRIVE	WILL ARRIVE	EXIT GATE
Sunset	26	11:00 am	On Time	D
Flyer	324	11:10 am	On Time	a
Limited	35	11:40 am	On T	

Good News for Travelers

that Good Brakes help to write

Next to a top safety record, railroad men are generally proudest of a blue-ribbon record for maintaining schedules. The "On Time" chalked on the announcement board is a big factor in winning passenger patronage and building good will.

Westinghouse HSC electro-pneumatic air brake equipment helps many famous trains to build reputations for dependability. In application and release, the impulse travels the length of the train in the wink of an eye. Braking pressures are equalized automatically on all cars in the train.

The engineman can make a later application in approaching restricted speed zones, and a quicker release in leaving. Running time can be substantially reduced without increasing top speed.

For your modern passenger trains, use this modern combination: HSC AIR BRAKES . . . for braking flexibility to match modern train speeds, and unequalled smooth action. SPEED GOVERNOR CONTROL . . . for regulating brake forces to wheel speeds. AP DECELOSTAT . . . for wheel slip detection to keep the wheels rolling.

*Brakes are Basic
to
Railroad Progress*

Westinghouse Air Brake Co.

WILMERDING, PA.

Operating Revenues and Operating Expenses of Class I Steam Railways

Compiled from 127 monthly reports of revenues and expenses representing 131 Class I steam railways

(Switching and Terminal Companies Not Included)

FOR THE MONTH OF APRIL 1947 AND 1946

Item	United States		Eastern District		Southern District		Western District	
	1947	1946	1947	1946	1947	1946	1947	1946
Miles of road operated at close of month	226,956	227,200	55,679	55,785	43,238	43,368	128,039	128,047
Revenues:								
Freight	\$564,807,074	\$411,751,113	\$224,392,013	\$155,635,276	\$107,316,079	\$75,661,367	\$233,098,982	\$180,454,470
Passenger	70,413,888	106,082,238	35,754,652	49,172,585	11,413,949	18,817,739	23,245,287	38,091,914
Mail	11,218,049	10,740,230	4,020,822	3,846,330	1,958,082	1,834,304	5,239,145	5,059,596
Express	11,784,913	9,869,370	3,712,141	1,302,070	2,564,453	1,621,686	5,508,319	6,945,614
All other operating revenues	31,232,306	28,184,066	14,139,193	13,343,061	5,043,923	3,786,273	12,049,190	11,054,732
Railway operating revenues	689,456,230	566,627,017	282,018,821	223,299,322	128,296,486	101,721,369	279,140,923	241,606,326
Expenses:								
Maintenance of way and structure	97,519,031	96,639,416	35,069,461	34,081,939	21,013,622	20,069,837	41,435,948	42,487,640
Depreciation	10,140,048	9,960,255	4,400,136	4,341,865	1,654,961	1,617,343	4,084,951	4,001,047
Retirements	645,377	861,240	123,485	208,315	140,175	198,284	381,717	454,641
Deferred maintenance	*458,870	*641,020	*15,236	*161,428	*34,458	*98,195	*409,176	*381,397
Amortization of defense projects	88,257	55,893	8,763	12,095	23,688	22,493	55,806	21,305
Equalization	*488,993	*1,739,406	410,235	*703,711	*744,186	*339,711	*155,042	*695,984
All other	87,593,212	88,142,454	30,142,078	30,384,803	19,973,442	18,669,623	37,477,692	39,088,028
Maintenance of equipment	127,635,227	121,044,972	56,425,234	51,754,892	23,985,300	21,243,309	47,224,693	48,046,771
Depreciation	19,127,256	18,515,461	7,998,762	7,871,620	3,906,759	3,666,093	7,221,735	6,977,748
Retirements	*23,058	*30,857	*1,835	*5,752	*8,942	*14,792	*12,281	*10,313
Deferred maintenance and major repairs	*372,599	*292,936	*39	*34,504	*74,047	*51,741	*298,513	*206,691
Amortization of defense projects	1,249,928	637,853	484,494	292,868	228,741	60,791	536,693	284,194
Equalization	213,380	178,827	42,928	*53,953	170,727	170,686	*275	*62,094
All other	107,440,320	102,036,624	47,900,924	43,684,613	19,762,062	17,412,272	39,777,334	40,939,739
Traffic	14,541,405	13,696,585	5,243,723	5,058,285	2,849,495	2,556,218	6,448,187	6,082,082
Transportation—Rail line	273,550,931	246,533,824	122,311,892	106,942,429	47,442,056	42,017,438	103,796,983	97,573,957
Miscellaneous operations	9,940,474	10,006,488	3,742,175	3,921,702	1,474,474	1,443,047	4,723,825	4,641,739
General	20,114,181	19,988,248	7,942,528	7,799,220	4,153,314	3,994,719	8,018,339	8,194,309
Railway operating expenses	543,301,249	507,909,533	230,735,013	209,558,467	100,918,261	91,324,568	211,647,975	207,026,498
Net revenue from railway operations	146,154,981	58,717,484	51,283,808	13,740,855	27,378,225	10,396,801	67,492,948	34,579,828
Railway tax accruals	73,195,340	35,612,089	26,461,432	13,017,765	15,127,326	7,091,910	31,606,582	15,502,414
Pay-roll taxes	28,169,549	20,546,491	11,962,291	8,511,373	5,274,369	3,602,605	10,932,889	8,432,513
Federal income taxes	21,981,180	*6,700,914	5,331,851	4,336,499	5,250,316	*878,390	11,399,013	*1,486,025
All other taxes	23,044,611	21,766,512	9,167,290	8,842,891	4,602,641	4,367,695	9,274,680	8,555,926
Railway operating income	72,959,641	23,105,395	24,822,376	723,090	12,250,899	3,304,891	35,886,366	19,677,414
Equipment rents—Dr. balance	11,094,439	9,204,981	5,739,249	4,458,596	*286,748	399,565	5,641,938	4,346,820
Joint facility rent—Dr. balance	3,455,514	3,178,294	1,807,833	1,656,853	419,935	335,037	1,227,746	1,186,404
Net railway operating income	58,409,688	10,722,120	17,275,294	*5,392,359	12,117,712	2,570,289	29,016,682	13,544,190
Ratio of expenses to revenues (per cent)	78.8	89.6	81.8	93.8	78.7	89.8	75.8	85.7

FOR THE FOUR MONTHS ENDED WITH APRIL 1947 AND 1946

Item	United States		Eastern District		Southern District		Western District	
	1947	1946	1947	1946	1947	1946	1947	1946
Miles of road operated at close of month	227,038	227,199	55,682	55,781	43,318	43,367	128,038	128,051
Revenues:								
Freight	\$2,226,447,712	\$1,769,801,253	\$872,118,825	\$674,315,610	\$455,449,751	\$364,458,285	\$898,879,136	\$731,027,358
Passenger	295,042,301	472,902,456	146,385,397	202,793,927	51,566,606	83,725,112	97,090,298	186,383,417
Mail	44,179,640	41,412,103	15,907,412	14,405,468	7,689,247	7,196,363	20,582,981	19,810,272
Express	40,529,905	32,945,698	12,631,291	3,471,585	8,033,749	5,820,582	19,864,865	23,653,531
All other operating revenues	122,345,941	115,290,713	55,013,008	53,174,547	19,828,156	15,998,860	47,504,757	46,117,306
Railway operating revenues	2,728,545,479	2,432,352,223	1,102,055,933	948,161,137	542,567,509	477,199,202	1,083,922,037	1,006,991,884
Expenses:								
Maintenance of way and structure	360,506,986	373,282,062	131,464,915	132,442,852	79,018,253	78,732,079	150,023,818	162,107,131
Depreciation	40,472,376	39,870,757	17,507,423	17,252,275	6,622,032	6,449,483	16,342,921	16,168,999
Retirements	1,706,804	2,260,358	474,364	420,442	299,190	389,570	933,250	1,450,346
Deferred maintenance	*1,405,594	*2,018,150	*129,846	*236,982	*110,952	*643,065	*1,164,796	*1,138,103
Amortization of defense projects	400,287	60,950	39,417	43,724	106,067	19,390	254,803	*2,164
Equalization	13,272,284	12,807,764	8,125,143	6,873,901	1,842,710	2,287,810	3,304,431	3,646,053
All other	306,060,829	320,300,383	105,448,414	108,089,492	70,259,206	70,228,891	130,353,209	141,982,000
Maintenance of equipment	499,679,846	492,976,920	219,239,189	208,033,722	96,792,980	90,093,549	183,647,677	194,849,649
Depreciation	75,822,450	73,641,295	31,539,497	31,059,133	15,441,878	14,715,701	28,841,075	27,866,461
Retirements	*108,857	*165,021	*14,337	*68,070	*37,254	*52,722	*57,266	*44,229
Deferred maintenance and major repairs	*1,309,952	*1,244,517	*2,839	*133,937	*296,785	*237,069	*1,010,328	*873,511
Amortization of defense projects	5,006,344	2,277,819	1,942,205	1,016,184	911,848	332,094	2,152,291	929,541
Equalization	1,573,888	1,220,543	240,167	*33,180	1,213,640	1,085,849	120,081	167,874
All other	418,695,973	417,246,801	185,534,496	176,193,592	79,559,653	74,249,696	153,601,824	166,803,513
Traffic	56,316,883	53,508,127	19,966,508	19,370,771	11,269,823	10,193,680	25,080,552	23,943,676
Transportation—Rail line	1,104,663,198	1,034,957,059	494,275,697	453,584,204	196,826,532	181,213,447	413,560,969	400,159,408
Miscellaneous operations	40,888,790	41,817,218	15,328,767	16,434,629	6,156,233	6,010,222	19,404,790	19,372,367
General	78,740,104	78,553,523	31,200,428	31,319,707	15,961,667	15,685,123	31,578,009	31,548,693
Railway operating expenses	2,140,796,807	2,075,094,909	911,475,504	861,185,885	406,025,488	381,928,100	823,295,815	831,980,924
Net revenue from railway operations	587,748,672	357,257,314	190,580,429	86,975,252	136,542,021	95,271,102	260,626,222	175,010,960
Railway tax accruals	301,554,844	189,103,217	105,314,821	59,001,159	70,074,969	50,462,586	126,165,054	79,639,472
Pay-roll taxes	112,147,160	84,687,402	47,803,710	35,351,588	21,033,311	15,233,308	43,310,139	34,102,506
Federal income taxes	98,121,831	17,263,667	21,174,555	*11,707,996	30,776,280	17,193,084	46,170,996	11,778,579
All other taxes	91,285,853	87,152,148	36,336,556	35,357,567	18,265,378	18,036,194	36,683,919	33,758,387
Railway operating income	286,193,828	168,154,097	85,265,608	27,974,093	66,467,052	44,808,516	134,461,168	95,371,488
Equipment rents—Dr. balance	39,669,255	34,648,642	20,969,013	15,469,407	*2,391,459	*1,460,889	21,091,701	20,640,124
Joint facility rent—Dr. balance	13,961,473	11,964,757	7,129,299	6,283,286	1,743,704	1,432,207	5,088,470	4,249,264
Net railway operating income	232,563,100	121,540,698	57,167,296	6,221,400	67,114,807	44,837,198	108,280,997	70,482,100
Ratio of expenses to revenues (per cent)	87.5	85.3	82.7	90.8	74.8*	80.0	76.0	82.6

* Decrease, deficit, or other reverse item.

† Railway operating revenues are after deduction of \$887,806 for the four months ended with April, 1946, to create a reserve for land grant deductions in dispute.

Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

Current Publications

ARTICLES IN PERIODICALS

Better Public Relations for You: New York Central Shows the Way, by William A. Sylvester. *Manufacturers' News*, April, 1947, pp. 5-7 & 20. Published by the Manufacturers' News, Inc., 624 S. Michigan Ave., Chicago 5. Single copies, 25 cents.

Mr. Sylvester outlines the public relations programs that have been instituted by the New York Central. He describes in some detail the classes in public relations for employees, the campaign for improving telephone service, and booklets distributed to school children.

Standard Oil—Erie Ring; A Point of View, by Julius Grodinsky. Reprinted from the *Mississippi Valley Historical Review*, March, 1947. Published by the Mississippi Valley Historical Association, Lincoln, Neb.

This is a comment on the article entitled "The Standard Oil, Child of the Erie Ring, 1868-1872," by Chester McArthur Destler, which appeared in the June, 1946, issue of the *Mississippi Valley Historical Review* (see *Railway Age*, November 16, 1946, page 863). Mr. Grodinsky explains that the contracts and letter discussed by Mr. Destler lead him to conclusions different from those reached by Mr. Destler.

TRADE PUBLICATIONS

The Safety Feature; illustrated in diagrams of low-water cases on syphon-equipped steam locomotives. 90 pages, 8½-in. by 11-in. Bulletin No. 17, published by the Locomotive Firebox Company, 310 South Michigan avenue, Chicago 4.

The diagrams in this bulletin show how Nicholson thermic syphons protected crown sheets in at least 90 specific instances, when low water occurred, by pouring water over the entire sheet except a small portion directly ahead of the syphons. The diagrams show the low-water line in each instance and the small overheated area which pulls away from a few radial staybolts, thereby warning the crew of what has happened and permitting the pressure to escape gradually, which prevents serious boiler explosions with attendant heavy damage to locomotives and loss of life. The bulletin gives \$90 to \$400 as the range of cost for repairing crown sheets on syphon-equipped locomotives following instances of low water.

Specification Data for Engineers and Architects. 16 pages. Published by the Ric-wil Company, Cleveland, Ohio. Free

Designed to be of use to engineers and architects, this comprehensive booklet is devoted to specifications for underground pipe distribution systems employing pre-fabricated insulated pipe conduit. All material is arranged in convenient tabular form and supplemented with diagrams and charts. In addition, the booklet contains construction details of Ric-wil insulated pipe units and accessories, and a page of installation photographs.

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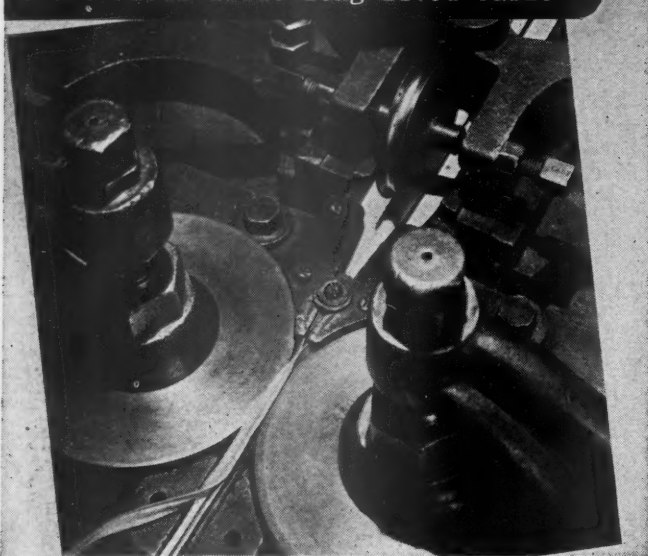


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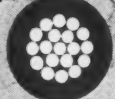
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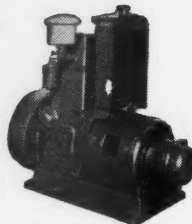
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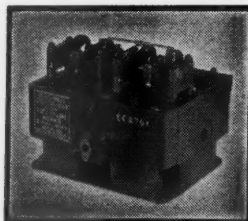


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